THE Soybean Digest

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P. L. 480

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a speech by

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MAY • 1957

VOLUME 17 • NUMBER 7

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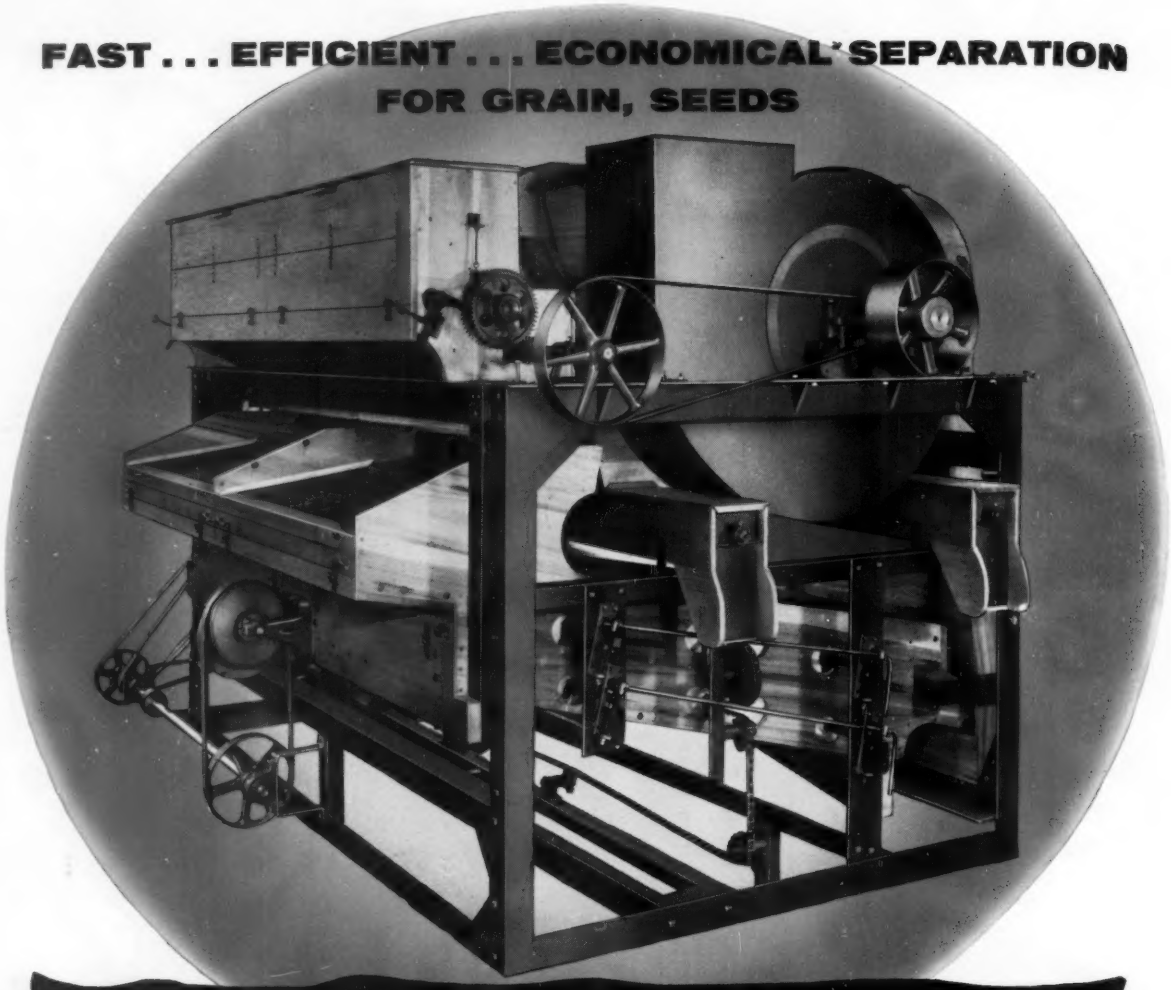

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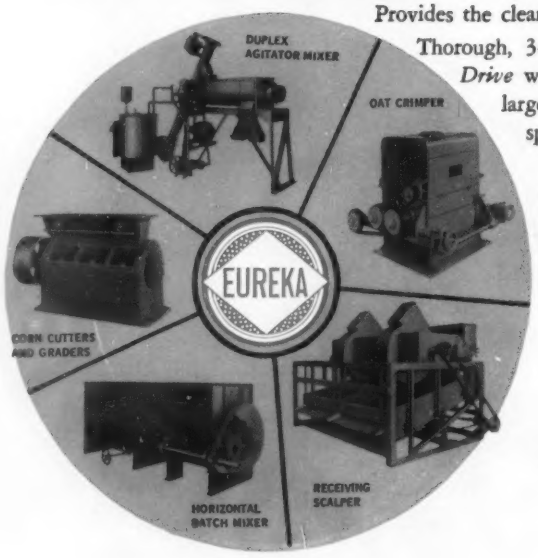

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THE SOYBEAN DIGEST

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Objectives of the American Soybean Association include the bringing together of all persons interested in the production, distribution and utilization of soybeans; the collection and dissemination of the best available information relating to both the practical and scientific phases of the problems of increased yields coupled with lessened costs; the safe-guarding of production against diseases and insect pests; the promotion of the development of new varieties; the encouragement of the interest of federal and state governments and experiment stations; and the rendering of all possible services to the industry.

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EDITOR'S DESK

. . . By GEO. M. STRAYER

AN INCREASE IN ACREAGE MEANS TROUBLE For the first time in the history of USDA price support operations on soybeans the CCC is going to be the proud (?) owner of a sizable quantity of soybeans come the takeover date of May 31. With present price schedules, and even with the possibility of sizable exports of oil becoming more imminent, it does not appear possible to strengthen prices sufficiently before takeover date to bring any large quantity of beans out of government programs.

Announced CCC disposal programs do not encourage price rises. The buyer for domestic processing or export shipment knows that during any month between June and September he can buy governmental stocks at a predetermined price, increasing by 1½¢ per month. Recent stock reports show only 44 million bushels in processors' hands—1½ months' crushing requirements. Margins have been small. There has been no incentive for the processor to buy soybeans.

Product sales that might have been made had some plants not closed down are now lost forever. As summer arrives any shipments of either soybeans or oil into world markets will merely come from what would otherwise have been 1957 crop exports. Consumption lost can never be regained.

We are heading for troubles. The major mistake was made when we jumped our 1956 production by 90 million bushels in 1 year. There are still greater markets for our products—but we cannot develop them all in 1 year.

And in my book those who forecast a 5% increase in acreage and a 1957 production of 430 million bushels are whistling in the dark. The day of 15-bushel average yields is over. Varieties, cultural practices, harvesting equipment, weed control—all have been developed to the point where average yields will continue to work upward—as they have done for 20 years. An acreage increase to me also means a bushel increase.

We need a pause in our acreage increases in order that we may catch up in our marketing operations. New areas are coming into production.

Let's be realistic. Weather in 1956 was good in many areas. It was bad in others. Every year is like that. Acreage increases mean multiplication of our troubles at this time. Let's not force Uncle Sam into being our market for soybeans—let's grow as our markets grow. And let's wait until there are greater indications of market growth than are evident today.

U. S. SOYBEANS AT TRADE FAIRS AROUND THE WORLD During the next month promotion of U. S. soybeans and soybean products in the form of fair exhibits will be going on at three different points in the world.

Starting May 5 in Tokyo Ersel Walley and Albert Dimond will be in attendance at the American Soybean Association exhibit at the Tokyo, Japan, International Trade Fair. This is the second year of showing at the Japanese event, as our indoctrination into International Fair exhibits took place at Osaka a year ago. Since Japan is our largest customer for American soybeans, and since soybeans are basically human food in Japan, our exhibit is being sponsored by the Japanese-American Soybean Institute, and will feature American soybeans and the products made from them in Japan. Cooperating will be the four basic Japanese foods trade groups. See Mr. Hayashi's article in the April issue for details.

In Palermo, Italy, the Soybean Council of America, Inc., will sponsor an exhibit of American soybean oil meal, especially 50% protein meal, as the basis of poultry feeding. This exhibit will be a virtual repeat of the very successful Verona exhibit sponsored in March, and reported in the April issue by Howard Roach. Mr. Kenneth Wright of the A. E. Staley Manufacturing Co. will be the poultry nutrition specialist representing the Council at this exhibit.

And in Barcelona, Spain, in early June the Soybean Council will exhibit American soybean oil to people attending the Barcelona International Samples Fair, an annual event heavily attended by foods people. Here the value of soybean oil as the basis of food products will be featured as a part of the Council's overall effort to merchandise American soybean oil in Spain and the Mediterranean area as a replacement for inadequate olive oil suppplies. Mr. Edward M. James, formerly of the Lever Brothers Co., will represent the Soybean Council at this exhibit.

All exhibits are being planned, erected and manned by the two soybean organizations and the international trade fairs branch of the Foreign Agricultural Service. Local expenses are being paid in the currencies of the countries concerned and from P. L. 480 funds acquired by the U. S. government in the sale of surplus commodities to those countries. Dollar expenses are borne by the two soybean groups.

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U. S. Soybeans at Fairs Around the World

Ersel Walley

Albert Dimond

THE PRESIDENT and a past president of the American Soybean Association will be in attendance at the International Trade Fair in Tokyo May 5-19 and in charge of the U. S. soybean exhibit.

President Albert Dimond, Lovington, Ill., farmer, left the United States on Apr. 28. He joined Past President Ersel Walley in Tokyo. Walley, who is president of Walley Agricultural Service of Fort Wayne, Ind., and chairman of the ASA trade and extension committee, left a few days earlier.

Walley also represented the Soybean Association at the International Trade Fair held in Osaka, Japan, in early 1956.

Walley and Dimond will work with the Japanese-American Soybean Institute and Japanese trade groups in behalf of the U. S. soybean market development program while in Japan.

Japan Groups, USDA Cooperate at Fair

SIX JAPANESE trade associations will join with the U. S. Department of Agriculture in sponsoring market-promotion exhibits of U. S. farm products at the International Trade Fair in Tokyo, May 5-19, the Department announced. The associations, representing Japanese firms which import and trade in U. S. products, will plan and operate the exhibits in cooperation with representatives of the Department.

Commodities to be featured in the exhibit are cotton, wheat, tobacco, soybeans, tallow, dairy products, popcorn and dried fruit—principally raisins. Samples of cheese, dry milk solids, and popcorn, the latter a new product to the Japanese, will be distributed.

This is the first overseas market-promotion exhibit in the Department's Trade Fair program in which foreign trade groups have assumed major responsibility for promoting the sale of U. S. agricultural products.

Japanese groups sponsoring exhibits include the Japan Cotton Promotion Institute, Japanese-American Soybean Institute, National Tobacco Sales Association, Japan Dairy Products Association, Japan Oil and Fat Processing Industry Association and Japan Dried Fruits Import Association.

U. S. trade associations participating will be the Oregon Wheat Growers League, Farmers' Hybrid Popcorn Growers' Association, American Soybean Association, Tobacco Associates, Inc., and Cotton Council, International.

Personal appearances by the 1957 American Dairy Princess, Miss Shari Lewis, of Dakin, Nebr., are scheduled. Arrangements for her participation in the exhibit have been made by the American Dairy Association and the Dairy Society International.

Japan is one of the largest markets for many U. S. agricultural commodities, and the Tokyo exhibit will be the largest arranged so far in the Department's international market development program. To house the exhibit, a 15,000-square-foot pavilion was constructed. The exhibit will be directed by A. J. Martin, representing the USDA's Foreign Agricultural Service.

This will be the second Department of Agriculture foreign market promotion exhibit of 1957. The first was at the International Agricultural Fair at Verona, Italy, in March. A portion of the foreign currencies accruing from the sale of U. S. farm surpluses under title I of P. L. 480 is available for this activity.

Council Sends James To Barcelona Fair

THE SOYBEAN COUNCIL of America, Inc., has retained Edward M. James, Swarthmore, Pa., as a technical consultant on vegetable oils,

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Howard L. Roach, the Council president, announces.

Edward M. James

Mr. James has had long experience as a specialist in vegetable oil refining, with Sharples Specialty Co., Procter & Gamble Co., and most recently with Lever Brothers Co.

He has been an independent consultant on glyceride oils and fats since September 1954. He was president of the American Oil Chemists Society in 1952-53.

Mr. James' first assignment with the Council will be to attend the International Samples Fair at Barcelona, Spain, June 1-20, where he will act as a consultant on the problems of processing and utilizing American soybean oils.

President Roach, now in Europe on soybean marketing projects in Spain and Italy, will also attend the Barcelona Fair.

Wright of Staleys To Palmero Fair

KENNETH N. WRIGHT, feed nutritionist with the A. E. Staley Manufacturing Co., Decatur, Ill., has been asked to serve as poultry nutrition specialist at the International Agricultural Fair, Palermo, Italy, May 25 to June 8. He will fly to Italy May 18 from New York.

K. N. Wright

The U. S. soybean exhibit at the fair is being sponsored jointly by the Soybean Council of America, Inc., and the Foreign Agricultural Service, U. S. Department of Agriculture.

Mr. Wright is recognized as an outstanding authority in the United States on 50% soybean oil meal. Joining the Staley Co. in 1946 his first project was to study and develop better heat treatment process for soybean oil meal to bring out its maximum nutritive value. He worked on the early research of Hi-Pro-Con, a 50% protein dehulled soybean oil meal, to determine its value as a quality source of protein and energy in modern feeds. This meal is sold on the basis of improving the available nutrient content of the feeds and its ability to reduce cost of production.

Poultry nutrition is being featured at the Palermo Fair because of the deep interest Italy has in developing the poultry industry in that country. At the fair special emphasis will be placed on the need for feeding poultry high energy, well-balanced rations, such as the type produced in the United States.

Indiana, Ohio Farmers Back Export Programs

IN SPITE of a bad storm and further threatening weather, about 200 enthusiastic soybean growers and others in 12 counties of northeastern Indiana and northwestern Ohio attended a district soybean meeting at Van Wert, Ohio, Apr. 5.

They heard Geo. M. Strayer, executive vice president of the American Soybean Association, discuss the importance of the export market to U. S. soybean producers. And they threshed over the following problems facing the industry:

1—Can the soybean crop continue to be the dumping ground for acreage diverted from other crops?

2—What is going to happen to the surplus from last year's crop, a surplus that may be owned by Uncle Sam?

3—What steps can we take to keep soybeans from getting into the surplus mess that now prevails in corn, wheat and cotton?

4—In short, what can we do to keep soybeans from becoming an unprofitable crop?

They contributed between $500 and $600 in cash for support of the U. S. soybean market development program in Japan now in its second year. The program is sponsored by the American Soybean Association.

And they were told that Ersel Walley of Fort Wayne, Ind., past president of the Soybean Association and one of the organizers of the meeting, would leave soon for Japan, where he would be in attendance at the soybean exhibit at the International Trade Fair in Tokyo May 5-19.

Soybean producers are extremely dependent on the export market if the crop is to continue to be profitable, Strayer said. He pointed out that about 25% of the farmer's cash income from soybeans comes from export of soybeans and soybean products.

A contract between the Soybean Association and the Foreign Agricultural Service of the U. S. Department of Agriculture had just been signed providing for the expenditure of $300,000 in P. L. 480 funds for soybean market development work in Japan in the coming 2-year period, Strayer said. Additional funds to keep the project going will be required from U. S. soybean producers and others in the industry, and from Japanese trade groups.

Strayer also told about similar soybean market development projects which are now being set up in Spain and Italy, under the auspices of the Soybean Council of America, Inc., that offer promise of greatly expanding the market for U. S. soybeans and soybean products in those countries.

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Plan Big Meetings at Minneapolis

PLANS ARE NOW going forward for the annual meetings of the American Soybean Association and the National Soybean Processors Association to be held at the Leamington Hotel, Minneapolis, Minn., Aug. 26-28. Details will appear in the next several issues of the Soybean Digest.

Meeting of the ASA program committee was held in Minneapolis Apr. 11, and preliminary plans are now being formulated.

The processors will hold their annual business meeting Aug. 26.

Formal ASA meetings will be Aug. 27 and 28.

There has been no definite decision concerning a field day. The program committee is trying to arrange a field tour for the 29th for those who can stay over.

Exhibit space for those who supply and otherwise serve the soybean industry will be available immediately adjacent to the meeting room.

Irrigated Acreage Expanding in Texas

OVER 125 producers and others from the upland plains area of Texas attended a soybean production meeting at Plainview, Tex., Apr. 8. They heard two panels of producers discuss soybean production, and an address on the world soybean situation by Geo. M. Strayer, executive vice president of the American Soybean Association, during the all-day session.

This part of western Texas is a brand new soybean production area and a lot of interest has been created. A total of 25,000 acres all under irrigation were grown in the area last year. A larger acreage is expected in 1957 due to reductions in wheat and cotton acreage.

Operators of cottonseed mills are also much interested in the new crop as they see in it a means of keeping their mills busy. Feeders in the area are traditional users of cottonseed cake and they may be somewhat reluctant on the start to feed soybean oil meal.

Presiding at the sessions were Ollie Liner, Hale County agricultural agent, and Bill Rodgers, Floyd County agricultural agent.

Dr. Harold Loden, Lubbock Agricultural Experiment Station, introduced the speaker.

Panel moderators were Jack King, associate county agent, Texas Agricultural Extension Service, Lubbock; Don L. Jones, superintendent of the Lubbock station; and John Odell, soybean department, Western Cottonoil Co., Lubbock.

Participants in the panels were: Harvey McEachern, Plainview; Jerry Paul Cooper, Lockney; Lawrence Amerson, Abernathy; Chester Mitchell, Lockney; W. B. Tilson, Plainview; W. E. Burnett, Plainview; Bob Gibson, Aiken; Jake Hartz, Jr., Stuttgart, Ark., former president of the American Soybean Association; Dr. Tom Longnecker, High Plains Research Station; Willie Teeter, Hale Center; Jack Billington, Lockney; R. C. Chaddick, Plainview; Raymond Rucker, Floyd County; R. E. Kirchoff, Halfway; Wm. T. McEachern, Hale Center; and Mr. Wiggam, Amarilla.

Western Cottonoil Co. at Lubbock furnished the barbecue luncheon at noon.

Young Bean Producer In Top Farmer List

AN ARKANSAS soybean producer has been named one of America's four outstanding young farmers of 1956.

He is Alex S. Curtis, 31, who owns and farms 400 acres of arable land in the Mississippi River Delta section of northeast Arkansas near Manila.

Alex S. Curtis

The awards were presented at a banquet in Durham, N. C., April 16. Sponsors were the U.S. Junior Chamber of Commerce and the American Petroleum Institute committee on agriculture.

Curtis was the first in his area to use fertilizer on soybeans, store soybeans and small grain and to furrow irrigate.

Curtis graduated with a degree in electrical engineering at the University of Arkansas in 1949, then bought a 400-acre rundown farm near Manila. The farm had been row-cropped to cotton for 20 years with an average yield of ½ bale per acre. The land suffered from spring wind erosion, no drainage and an invasion of Johnsongrass, sandbur and caltrop.

In 1956 Curtis, his wife and four children were named the state's outstanding farm family. More than 200 people visited the farm to see where, in 6 years, average crop yields had been increased 250%.

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PLANNING

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To maintain a top competitive position in the soybean oil market, Honeymead Products Company decided last year to increase their production.

In 1953 Blaw-Knox had designed, engineered, and constructed a 500-ton-per-day Rotocel in Honeymead's soybean plant at Mankato, Minnesota —which was the largest unit of its type in the world.

In 1956 Honeymead gave Blaw-Knox another contract; this time for a 1200-ton-per-day Rotocel —again the world's largest.

To install this new unit with minimum loss of production time required complex, detailed planning by Blaw-Knox engineers. For instance, before the 500-ton-per-day Rotocel was taken out of production, every piece of pipe to connect the new 1200-ton-per-day unit was measured, cut and threaded. Every bolt and lock washer was on the job.

Results: the switch over was handled so efficiently that only 13 days of production time were lost. Honeymead more than doubled their production and improved their competitive position.

As a further result, Blaw-Knox obtained another assignment from Honeymead—to design, engineer and construct an oil de-odorization system, which also will be the largest of its kind in the world.

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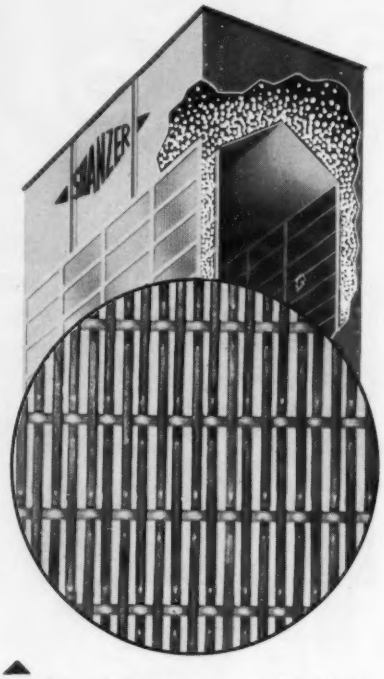

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AMERICAN SOYBEAN ASSOCIATION

Late News

Vol. 5, No. 7
Hudson, Iowa
May 6, 1957

Published 32 times yearly as a service to the soybean industry.

LOOKS LIKE MORE SOYBEANS

The nation's farmers will increase soybean plantings for the 7th successive year in line with Department of Agriculture's Mar. 1 planting intentions report—and against American Soybean Association warning that more soybean acres at this time will cause market trouble. (See editorial by Geo. M. Strayer on page 4.) This is the consensus of opinion of our observers. **The increase will come in most parts of the soybean belt.**

Greatest force for more soybean acres now is the fact that farm work is seasonally late most places. A late spring always means more planted soybeans.

It is true that the thinking among Cornbelt farmers has been to ignore corn acreage allotments and plant more corn at the expense of other crops. Present low prices tend to put a damper on soybean enthusiasm. And dry weather in recent years has discouraged soybean producers in some areas.

But weather was unfavorable for land preparation in April. **Much of the oats acreage was still unplanted in late April, and a large part of this will now go to beans.** If weather continues wet it will mean a shift of corn acres into beans.

Dixon Jordan, Standard Commission Co., Memphis, sees a 1-2% increase in soybean acres in the Midsouth, with a net increase in Arkansas offsetting reductions in other Midsouth states.

Observers believe soybean acres in Ontario will be up 5 to 15%, depending on weather. Very little spring grain has been planted there.

Apparently there will be some fewer acres planted to soybeans in southeast Missouri, Mississippi County, Ark., and Lake County, Tenn., where dry weather the past several seasons has discouraged soybean producers. There will be increases in corn, grain sorghum and small grain here.

PLANTING IS LATE

Spring work is generally late in both northern and southern parts of the soybean belt, and **only a very small acreage of soybeans had been planted by late April.** Ten percent of the crop was planted in eastern North Carolina and we had a few scattered reports of soybean planting in southeast Missouri, Arkansas, Tennessee and Mississippi, but otherwise few soybeans were in the ground May 1.

Jordan at Memphis estimated that not over 1% of the crop was planted in the Midsouth by Apr. 26.

PLENTY OF MOISTURE MOST PLACES

Subsoil moisture is still not fully replenished in western soybean areas including Kansas, the Dakotas, western Iowa and parts of southern Minnesota. But the situation has vastly improved in recent weeks.

An Iowa Experiment Station survey shows subsoil moisture still somewhat deficient over most of Iowa except the southeast quarter, not a leading soybean area.

But elsewhere in practically the whole soybean belt soil moisture is reported ample to excessive. Hartz at Stuttgart, Ark., says the moisture supply all over the South is "way too much."

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TREND IN VARIETIES

Some reversal of the trend toward Lee and back to Ogden and Dortchsoy varieties is reported in parts of the South. Hartz says the reason is that Lee is a little too late to follow with small grains in the fall.

But in most Southern states the strong trend to Lee continues. H. V. Latham, Latham Seed & Equipment Co., Belhaven, N. C., says the eastern North Carolina acreage will be practically all in Lee. Harosoy will increase in Illinois and Ohio at the expense of Hawkeye, and there is considerable interest in Adams in Indiana and Ohio. There will be a larger Clark acreage in southern Illinois and Indiana.

There will be some blending of varieties in Indiana due to publicity issued by Purdue University. J. E. Johnson at Champaign, Ill., says there may also be some blending in his area.

PROSPECTIVE CARRYOVER PARED

Observers have been taking another look at the prospective carryover of 1956-crop soybeans into the next marketing year, following the issuance of the Department of Agriculture's Apr. 1 stocks reports. **Some estimates now place the prospective carryover at 10 to 17 million bushels,** though USDA officials see it at 25 to 30 million bushels. (See Washington Digest, page 42.)

The University of Illinois grain marketing staff points out that the actual inventory of soybeans Apr. 1 was 20 million bushels less than the 1956 crop minus the estimated disappearance. Either the crop was overestimated or Apr. 1 stocks were larger than the report indicates.

MARKETINGS STILL SLOW

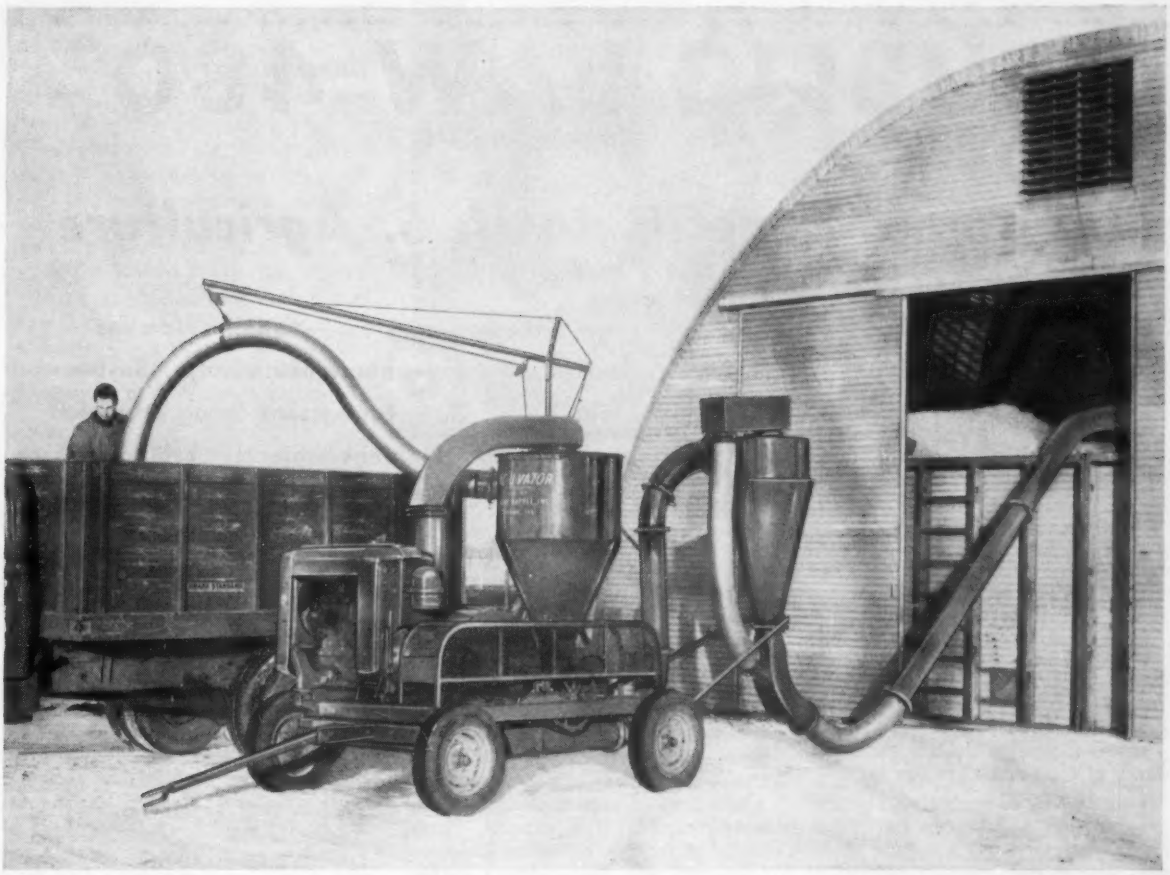
Farmer marketings most places continue very small and it seems evident Commodity Credit Corp. will take over a large bushelage of soybeans after the takeover date May 31. However, J. W. Huegely, Huegely Elevator Co., Nashville, Ill., reports farmers in his area are getting tired of the holding attitude and are regularly selling soybeans from day to day.

T. A. Hieronymus, associate professor of agricultural marketing, University of Illinois, will make a firsthand study of the market for high-protein concentrates in Northern Europe this summer.

Formosa bought 5,000 tons of soybeans for July shipment in late April. USDA announced purchase authorization to Italy for $7,545,000 worth of edible oils for shipment before June 29.

	Cash prices Apr. 26
Soybeans, No. 1 yellow, Chicago, bu.	$ 2.43
Soybean oil meal, Decatur, ton	46.00
Soybean oil, crude, Decatur, lb.	.11⅞

	Cash price to farmers for No. 1 soybeans Apr. 26	Cash price to farmers for No. 2 soybeans Apr. 26	Retail cash price for bagged soybean oil meal Apr. 26
Ill.	$2.19 @$2.26	$2.24	$59 @$86
Ind.	2.15 @ 2.26	2.22	56 @ 70
Iowa	2.17		70
Minn.	2.18		70
Miss.	2.20		
Mo.	2.23 @ 2.30	2.20 @ $2.23	60
N. C.		2.30	
N. Dak.		2.04	64
Ohio	2.19 @ 2.22		78
Tenn.	2.20 @ 2.22		55.50 @ 65
Ontario		2.20	



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CONVEYS . . . The Vac-U-Vator is ideal for big but intermittent jobs not warranting permanent installations. It can convey grain at 1,200-1,800 bu. per hr. between any two storage or transporting points up to 300-ft. apart. It will elevate to 75-ft.

CLEANS . . . The Vac-U-Vator is the only piece of mobile equipment that will clean grain during the conveying operation. It effectively removes insects, rodent pellets, broken kernels and dust.

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PUBLIC LAW 480

Its untold benefits to U. S. Agriculture

P. L. 480 is no giveaway program—and it offers us the chance to use our farm abundance wisely. Soybeans are one of a number of U. S. farm crops being promoted abroad under market development projects. From a speech by Senator Humphrey before the U. S. Senate Mar. 29.

By THE HONORABLE
H. H. HUMPHREY
Senator from Minnesota

PUBLIC LAW 480 has proven itself a constructive way of dealing with our agricultural abundance —showing what a blessing an abundance of food and fibre can be.

I am convinced this relatively new program has had far greater beneficial impact on our domestic economy and on our international policy of strengthening freedom in the world than most persons realize. In the years to come we shall hear much more about P. L. 480 and the concept it embraces. So it is well for all of us to understand it.

It is highly significant that this is one major program which has the united support of all our general farm organizations. The American Farm Bureau Federation has been one of the active promoters and supporters of P. L. 480. The National Farmers Union urges its extension and expansion. The Grange has likewise supported this wiser use of our abundance.

Farm people want to see our abundance used wisely, and they are learning P. L. 480 offers an opportunity for that to be done.

* * *

Let us examine the situation in which we found ourselves prior to the passage of P. L. 480. During World War II, and in the years immediately following the war, American farmers had been called on to produce at ever higher levels. Agricultural output shot up by over 40% over prewar levels. The productive capacity of our farms was soon running far in excess of domestic and export-market effective demand. Surpluses built up in government hands. A major factor causing the surpluses was the sharp reduction in exports from the postwar peaks.

Many other countries were developing, both for their own domestic use and for export, increased supplies of commodities formerly obtained from the United States. A whole host of impediments to trade were placed on U. S. exports. These included foreign exchange controls, bilateral trade and payment agreements, quotas, embargoes, licenses, special tariff and import fees, mixing regulations, state trading and monopolies, and a whole host of other control paraphernalia.

These served as effective throttles on the exports of American farm products. Congress set as its goal the reversal of this trend toward restrictive exports, by expanding world outlets by means of the enactment of P. L. 480.

25% Sales Exports

While the percentage of harvested acreage devoted to producing export crops and products has varied from year to year, currently about 1 acre out of every 9 acres harvested is devoted to producing agricultural exports. Similarly, about 10¢ out of every dollar of cash farm income came from the crops exported.

For some crops the percentage is much higher. For wheat and cotton this runs as high as 40¢; for rice, 33¢; for soybeans, including the oil, about 25¢.

As these losses of export markets affected farm income sharply, it became essential that the Congress do something to reverse this trend.

The 83rd Congress gave expression of its determination to deal with our abundant agriculture and the loss of export markets in a constructive way by the passage of Public Law 480. This legislation technically known as the Agricultural Trade Development and Assistance Act is the result of long congressional consideration of many bills designed to help solve the problems of agricultural surpluses through expanding the export of such commodities.

In its passage and the subsequent appropriations to implement it, this legislation received strong biparti-

Senator H. H. Humphrey

san support. It is making a great contribution in many aspects of both our domestic and foreign economic policies. Its multimillion-dollar appropriations are bringing untold benefits to American agriculture and to consumers all over the world.

* * *

Now, what is P. L. 480 and what is it accomplishing? The major objectives of this law are spelled out in

the policy provisions of the law. They are as follows:

1—To expand international trade between the United States and friendly nations.

2—To promote the economic stability of American agriculture.

3—To make maximum efficient use of surplus agricultural commodities in furtherance of the foreign policy of the United States.

4—To facilitate the expansion of foreign trade by providing a means whereby U. S. surplus agricultural commodities in excess of the usual marketings of such commodities may be sold through private trade channels and foreign currencies accepted in payment.

Use of Foreign Money

Contrary to many misconceptions, the P. L. 480 program is not a gigantic giveaway. Congress spelled out the policy on the use of foreign currencies accruing from the sales, as follows:

1—To expand international trade.

2—To encourage economic development.

3—To purchase strategic materials.

4—To pay U. S. obligations abroad.

5—To foster in other ways the foreign policy of the United States.

Title I of this legislation authorizes the use of not in excess of $3 billion CCC funds or assets to finance the export sale of surplus agricultural commodities to friendly countries for foreign currencies.

The present bill, extending the entire law for another year, adds an additional billion to that authorization.

Title II of the law provides for famine relief and other emergency assistance, providing a means by which we can help friendly foreign people in time of urgent need.

Title III of the law provides a mandate to the Secretary of Agriculture to seek to protect the assets of Commodity Credit Corp. by bartering surplus food and fiber for strategic materials with less risk of deterioration and less cost of storage.

* * *

Let us examine how title I of P. L. 480 operates. Commodity agreements are entered into with governments of importing countries. These agreements provide for the payment of commodities imported from the United States in local currency. Such local currency must be expended as specified in the act. After such government-to-government agreements are made, the importing country applies to the Foreign Agricultural Service of the U. S. Department of Agriculture for purchase authorizations, which provide for dollar financing of the commodity sales and specify the conditions under which such financing will be made available.

TRADE FAIRS in Europe and Asia are an example of P. L. 480 activity. An example was the International Agricultural Trade Fair at Verona, Italy, Mar. 10-19. Above, crowds pour into the U. S. pavilion on the opening day. More than one-half million Italian farm and trade people as well as many from other countries visited the U. S. exhibit, which included displays of soybean oil meal, during the fair. The U. S. exhibit was to be shown also at the trade fair at Palermo in Italy.

At this point, private U. S. exporters sell to importers authorized by the importing country. There is always a public announcement made when the agreements are signed and purchase authorizations are issued. This is done so that all segments of the private trade can be familiar with the entire operation.

In view of the fact that U. S. government funds are used to finance title I sales, certain controls are established, such as the banks involved, normal commercial letters of credit, exchange rates, and so on. Under this procedure, the U. S. exporter can be sure that the transaction, if otherwise in compliance with the program, will be financed by insisting that his contract be covered by an irrevocable letter of credit. In every way possible the sale is made as closely as possible in line with normal U. S. commercial practice.

In order to make sure that we are developing new sales through sales of local currencies, the legislation sets rigid standards, including the requirement that the President shall take:

1—Reasonable precautions to safeguard against displacement of usual marketings of the United States or friendly nations, and to assure insofar as practicable that sales will not disrupt world prices, and

2—Take appropriate steps to assure that private trade channels are used both with respect to sales from privately owned stocks and from stocks owned by the CCC, as far as practicable.

Thus far agreements have been signed with 30 countries for the sale of commodities valued at $2.8 billion. Through sales of foreign currencies under title I, we are moving surpluses to countries that are short of dollars. The prices are not lower than those for export dollar sales.

As of the end of 1956, the following surplus commodities and quantities had been programmed since the beginning of the program:

	Million
Wheat and flour—bushels	432.0
Feed grains—bushels	66.0
Rice—hundredweight	19.0
Cotton—bales	2.6
Tobacco—pounds	143.0
Dairy products—pounds	130.0
Fats and oils—pounds	1,598.0
Poultry—pounds	3.0
Fruits and vegetables—pounds	81.0
Meat—pounds	149.0

PLANNED USES OF FOREIGN CURRENCY GENERATED FROM SALES UNDER TITLE I, PUBLIC LAW 480 (Through Dec. 31, 1956)

	Percent
Loans for multilateral trade and economic development	56.8
Payment of U. S. obligations	24.8
Military procurement	11.5
Others[1]	5.3
Market development	1.6

[1] This includes (a) purchases of strategic materials (0.4%), (b) purchases of goods for other countries (1.2%), (c) grants for economic development (3.2%), (d) international educational exchange (0.8%), (e) translation and publication (0.1%), (f) information and education (0.2%).

(Continued on next page)

Agricultural Market Development

Market development projects are being carried out in close cooperation between U. S. and foreign trade groups so as to provide benefits to both. Generally, the United States provides part of the foreign currencies required for the project and gives general supervision to the activities. U. S. private trade groups carry out the project and provide for the necessary dollar costs. The cooperating foreign trade group meets part of the local costs.

Thus we develop new opportunities for working together on the problems of expanding old and developing new commercial markets for U. S. agricultural products. I submit that this program has worked to the benefit of the American agricultural producer, processor and exporter.

Some of the U. S. farm commodities being promoted abroad under these projects are cotton, wheat, flour, beef cattle, dairy cattle, soybeans, tobacco, fruit, tallow, dairy products, poultry, and eggs.

Outstanding examples are the soybean market development project now operating in Japan through the Japanese-American Soybean Institute and sponsored by the American Soybean Association; and similar soybean projects now being set up by the Soybean Council of America, Inc., in Spain and Italy.—EDITOR.

Another type of market development is through participation in international trade and food fairs. During 1956, U. S. agricultural exhibits under P. L. 480 were visited by 7½ million people in many countries including the United Kingdom, Austria, Greece, Yugoslavia, Thailand, and Colombia. Thus large numbers of people were acquainted with the quality and availability of U. S. agricultural products. For the first time many prospective customers are seeing, tasting and feeling our products. Out of this will come new customers.

The International Trade Fairs at Osaka, Japan, in 1956 and Tokyo this April, and Verona, Italy, in March, where the U. S. soybean industry exhibited under the auspices of the American Soybean Association and the Soybean Council of America, Inc., are examples of these fairs.—EDITOR.

* * *

Here is a program that provides the means for the proper and constructive and sensible utilization of our food and fiber supply. If there ever was one area where we could use it, it is in building international understanding.

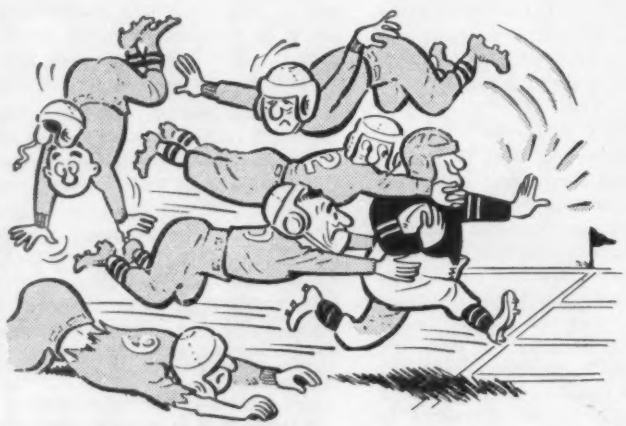
I say on the floor of the Senate today that we can convert wheat into bricks and corn into steel and mortar, and we can take soybeans and cotton and rice and change them into education. We can do that if we have any imagination and any will.

Fats Important in Diet

TOO MUCH sensationalism has entered recent discussion of atherosclerosis, a disease of the arteries that contributes to coronary heart ailments, according to Dr. Federick J. Stare, chairman of the department of nutrition at the Harvard School of Public Health.

Dr. Stare spoke before the New York Academy of Medicine. He said experimentation seems to indicate that adequate amounts of unsaturated fats in the diet may be of value in controlling the level of blood cholesterol.

Certain liquid oils such as cottonseed, corn and soybean are good sources of unsaturated fats. Hydrogenated shortenings are a reasonably good source of these unsaturated fats.



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State tests show an average of 20% increase in stand with Du Pont ARASAN®

The tiny cracks caused by harvesting make it easy for disease organisms to penetrate soybean seed. This can mean a costly percentage of seed that's killed before it sprouts—unless you insist on effective protection.

For a few cents an acre, treatment with Du Pont "Arasan" stops disease and helps your crop start clean and strong. It clings tight to seed, seals off cracks, controls seed rot, mildew, purple stain and other diseases.

Improve your stand and yield by asking your treater for "Arasan" on every bushel you plant. "Arasan" formulations are also available in handy sizes for on-the-farm treating. Inoculate just before planting for top return from both treatments.

On all chemicals, follow label instructions and warnings carefully.

FOR DOUBLE PROTECTION ON YOUR SEED... Use Du Pont "Delsan" A-D where soil insects, as well as disease, are a problem. "Delsan" A-D is a combination treatment...contains "Arasan" to disinfect against disease and dieldrin to control soil insects.

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...THROUGH CHEMISTRY

ARASAN®
Seed Disinfectants and Protectants

Your "Magic Key" to Bigger, Better Crops

Eleven Steps Toward

HIGH PRODUCTION

Of Soybeans in the Mississippi Delta

By E. E. HARTWIG

Agronomist, Delta Branch Experiment Station, Stoneville, Miss.

1—**Time of Planting.** Plant soybeans after cotton is planted. In general, best results will be obtained from plantings made between May 1 and May 25. In studies including varieties maturing at different dates, all have given higher seed yields when planted during May than when planted in early April.

Seed harvested from these varieties planted during May has been of superior quality to that from April plantings.

All varieties make more rapid growth when planted after the soil is warm than when planted in cold soil. Comparative studies show that varieties planted Apr. 10 and Apr. 20 have made only 60% as much growth 6 weeks after emergence as when planted later. Rapid growth is of considerable value in weed control.

Delaying planting of Ogden from Apr. 10 to May 20 results in approximately 4 days delay in maturity.

On sandy soils where crops have a tendency to suffer from drouth, best results can usually be obtained from delaying planting until early June, but do not plant after grain.

2—**Depth of Planting.** Planting depth should be regulated by moisture supply in the soil. On sandy loam soils, plant as shallow as possible and yet place seed in moist soil. Approximately 1-inch depth is excellent, unless soil is dry.

If packer wheels on the planter do not leave soil firm, cultipack immediately after planting. On heavy, clay soils plant about 2½ inches deep when planting after May 1.

If soil must be disked deeply to destroy winter weeds, delay planting until after a rain and plant with very shallow land preparation, placing seed in moist soil. A cultivator mounted on the front of a tractor having a rear-mounted planter with a sweep placed over the row aids in getting seed placed in moist soil.

Excellent stands have been obtained without rain in each of the past 3 years by using a double disk opener rather than the conventional sword opener. The double disk opener permits deep placement of seed in firm, moist clay soil. A spring-tooth harrow has been used satisfactorily for shallow cultivation prior to planting with the double disk opener.

3—**Rate of Planting.** Plant 10 to 12 viable seeds per foot of row. With a well-prepared seedbed, this is an adequate stand for top seed yield and for early weed control. With varieties such as Dorman, Ogden, Lee, Roanoke or Jackson, when planted in 36- to 40-inch rows, 40 to 60 pounds of seed will be required per acre.

4—**Row Widths.** No yield advantage can be expected under most conditions in the Delta from planting adapted varieties in rows closer than conventional 36- to 40-inch rows. Although row middles will be shaded earlier in narrow rows, more lodging is encountered. Four 36-inch or 38-inch rows can be handled with greater ease with a 12-foot combine than four 40-inch rows.

5—**Cultivation.** The main purpose of cultivation is to control weeds, and consequently, should be only deep enough to destroy weeds. When using regular cultivating equipment, set as close to the row as possible for first cultivation. The rotary hoe does an excellent job of destroying annual weed seedlings while beans are small. If land is heavily infested with Johnson grass, plant small grain after soybeans are harvested, and summer fallow the next year after grain is harvested to destroy Johnson grass.

6—**Seed Source.** The area where seed is grown has no influence on the crop produced. Good quality seed of adapted varieties can be produced locally. Seed should be harvested as soon as possible after it is mature and be put in storage with a moisture content of 12½% or less.

7—**Inoculation.** Soybeans will produce their own nitrogen if properly inoculated with nodule bacteria. These bacteria will live for several years in the soil and no yield response has been obtained from inoculation where nodulated soybeans have been grown in the past 3 to 5 years. However, if nodulated soybeans have not been grown in recent years, be sure to inoculate seed at planting time with soybean nodule bacteria. When it is necessary to inoculate, do not use seed treatment. If nodules are not present on soybean roots, the plant will require nitrogen fertilization just as cotton or corn.

8—**Seed Treatment.** Treating seed with Spergon or Arasan will usually result in improved stands. Seed may be treated with these materials at any time between harvest and planting time. Seed treatment will reduce the effectiveness of inoculation, but will not harm the bacteria already in the soil.

9—**Fertilization.** On nearly all Delta soils, soybeans have given no response to applications of phosphorous or potash. No increase in seed yield can be expected from nitrogen fertilization if soybeans are properly inoculated.

10—**Defoliation.** Soybeans normally shed their leaves as they reach maturity. This is a normal maturation process with food materials being moved from the leaves to the seeds as the plants mature. Defoliation will reduce yields. Removing leaves from Ogden at 21 days prior to normal combine maturity resulted in a yield loss of nearly 30%. This early defoliation would have permitted combining 3 days earlier than normal. Removing leaves as they were beginning to yellow still resulted in a 15% yield loss.

11—**Harvesting.** The combine is built to do a good job of harvesting soybeans. However, to do its best work, it must be properly adjusted and soybeans must be low in moisture. For every 36 to 40 seeds per square yard on the ground, there is a harvesting loss of 1 bushel per acre. Care should be taken to keep the cutter bar close enough to the ground to cut below the pods. Cutting high enough to leave 5 to 6 pods per foot of row means a loss of 1 bushel per acre.

Humphreys Co., Miss. Sets Production Goal

A $1,400,000 INCREASE in gross cash income for the 600 or more commercial soybean growers in Humphreys County, Miss., is possible if the goal of 30 bushels per acre set by the Crop Improvement Association committee is reached, according to Elmo Hill, county agent at Belzoni, Miss.

The committee offers the following suggestions in the effort to reach the 30-bushel goal, as reported in Delta Farm Press:

1—Break the soil to a depth of 12 inches or through the plow pan.

2—Use the Lee variety for mid-season, Roanoke for late-season, and Perry or Clark for September harvesting. Soils that suffer from drouth in late summer should be planted about June 10 to Lee, Roanoke or Jackson.

3—Plant after Apr. 25 when the soil warms up. Seed planted after May 1 will grow faster and aid in controlling weeds and grass.

4—Rate of seeding. If seed germinate 80%, 15 seed per foot of row. If seed germinate well 12 seed per foot would be desirable. One seed per inch.

5—Seed should be treated with Arasan or Spergon when they are recleaned. Inoculate seed if crop is not to follow soybeans.

6—Cultivate soybeans only deep enough and frequent enough to control weeds. It is imperative that weeds be controlled.

7—Combine beans when moisture is 13% or lower with the combine adjusted properly.

8—Save adequate seed supply from crop that is pure as to variety.

9—Have soil analyzed to determine if fertilizer is needed.

10—Irrigate where possible.

The acreage devoted to soybeans in Humphreys County in 1957 will exceed the acreage to cotton.

Ogden Leads in Tenn.

OGDEN led all other varieties in average yield in test results from three locations in 1956 and two in 1955 by the Tennessee Agricultural Experiment Station.

Test locations were Knoxville, Columbia and Jackson. The 1955 results at Jackson were not averaged since yields were erratic.

Average bushels-per-acre yields of the varieties tested: Ogden 26.1; Lee 25.7; Volstate 23.6; Perry 21.6; S-100 21.2; Dorman 20.8; Wabash 20.1.

How permanent is "temporary"?

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During World War II the Federal Government imposed special excise taxes on the passenger fares and freight charges you paid to railroads and other common carrier transportation. One reason for these special taxes was to discourage the use of these transportation facilities in wartime.

World War II is long since over but these taxes go on — and on. You are *still* paying them. On nearly all intercity tickets, they add an extra 10 per cent to the fare you pay. And as goods move through the processes of production and distribution, they add 3 per cent to the freight charges at every stage of the movement.

These burdensome and discriminatory taxes are still discouraging the use of our public transportation systems. And by so doing, these taxes are weakening our public carriers – essential to peacetime commerce and vital to national defense.

ASSOCIATION OF
AMERICAN RAILROADS
WASHINGTON, D. C.

IRRIGATED soybeans in Hall County, Nebr. Photo by Soil Conservation Service Photographer B. C. McLean.

40 bushels an acre or more—

Irrigation Produces High Yields in Nebraska

By DR. D. G. HANWAY
Nebraska Agricultural Experiment Station
Reprinted from the Nebraska Farmer

SOYBEANS have become an important cash crop on irrigated land in central Nebraska. Buffalo County alone harvested 8,500 acres in 1955.

Although only about 10% of the state's soybean acreage was irrigated in 1956, it produced 25% of the total crop. The application of good practices on irrigated land have given yields of 40 bushels per acre or more. Such yields are comparable to 100-bushel corn.

Research in central Nebraska has given information on rates of planting, row spacings, fertility levels, irrigation practices and choice of adapted varieties. Timeliness of operations is important if good stands are to be obtained, weeds controlled, and harvesting losses minimized. As with corn, attention to all details helps insure good yields.

Fertilizer Responses

The contrast in fertilizer responses in 1954 and 1955 experiments has very practical implications for soybean growers. The 1954 experiment was planted on soybean ground with a high level of available nitrogen and phosphate. Fertilization at rates supplying 80 pounds of phosphate and up to 160 pounds of nitrogen had no measurable effect. The 1955 experiment, on the other hand, was planted on land that had never before grown soybeans.

The previous crop was corn that yielded about 80 bushels per acre. Although the soybeans were inoculated, they looked nitrogen deficient throughout much of the season. A yield increase of 9 bushels per acre was obtained when 60 pounds of nitrogen was side dressed at planting or at the bud stage on plots that were well irrigated.

The addition of nitrogen fertilizer to non-irrigated plots had little effect, and six irrigations without nitrogen fertilizer increased yields only 7 bushels per acre. The combination of 60 pounds of nitrogen and six irrigations increased yields 16 bushels. Thus, attention to fertility as well as water is essential. Inoculation cannot be depended on to supply adequate nitrogen for good yields if the available nitrogen supply is low. If soybeans are planted on such land, they should be inoculated, but additional nitrogen will probably be profitable. Phosphate fertilizers have not increased yields in any Nebraska tests to date.

Although considerable difficulty was encountered in irrigating 19-inch rows in 1954, they yielded almost 5 bushels per acre more than 38-inch rows. Twenty-eight-inch rows in 1955 yielded about 4 bushels more than 40-inch rows when planted at rates that would give the same plant spacing within the row, and they were irrigated without difficulty.

Dropping one viable seed per inch of row regardless of row spacing is recommended. This will be approximately 60 pounds per acre in 40-inch rows or 90 pounds in 28-inch rows. This spacing will help shade out weeds, reduce branching, and cause pods to be set higher above the ground.

The highest yields were obtained both years by maintaining a high moisture level throughout the season. The recommended practice of having the top 4 to 6 feet of soil wet at planting was followed both years. Four irrigations were required in 1954 and six in 1955 to maintain the desired moisture level.

For the 2 years non-irrigated plots averaged 22 bushels per acre. Average yields from one, two, and four (or six) irrigations were 30, 33, and 35½ bushels, respectively. Thus, a single irrigation applied about midway in the bloom period boosted yields an average of 8 bushels. Two irrigations increased yields another 3 bushels which was only 2½ bushels less than obtained from the best irrigation treatments. The best treatment yielded 43 bushels per acre in 1954 and 37 bushels in 1955.

No Critical Period

Soybeans do not have any growth period as critical as the tasseling-silking stage of corn. Very respectable yields can be obtained with one or two irrigations if the root zone has been wet before planting. Thus, they may be used as a hedge if irrigation water is too limited to provide adequate water for corn on all the acreage irrigated from a single source.

Hawkeye, Adams, and Lincoln have about the same average yields over a period of years in central Nebraska. Hawkeye lodges least and is the most popular variety.

To get top soybean yields, choose an adapted variety, have a good level of fertility and the root zone wet, inoculate, plant one viable seed per inch of row in rows as narrow as machinery will handle, control weeds, irrigate so as to maintain a high moisture level throughout the season, and harvest carefully as soon as the moisture content of the seed drops to 13%.

If your supply of irrigation water is limited, very respectable yields can be obtained with one to two irrigations. Be sure to start out with a good supply of moisture in the soil and irrigate at least once relatively early in the blooming period so as to insure a good pod set.

Soybeans can be grown successfully under irrigation in any part of Nebraska.

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constantly
threatens your grain
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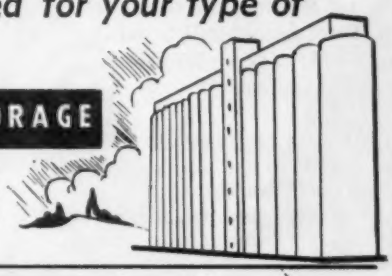
Automatic and manual temperature scanning of bins for terminals, sub-terminals. Controls in office, gallery.



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Electronic and portable reading controls in headhouse or gallery. Scan bins top to bottom every 6-foot level. Ideal for wood, steel, concrete houses.

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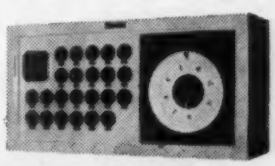

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Greater Markets for Fats and Oils

The best approach to the farm program

The full commission on increased industrial use of agricultural products issued an interim report to the Congress on Apr. 17, designed to be in time to permit legislative action on its findings this year. The final report will be issued June 15. (See Washington Digest page 43)

"THE DEVELOPMENT of greater markets for fats and oils is probably the best approach that we have today toward an economically sound farm program that can be big enough to really help divert acres from surplus crops," Willard C. Lighter, executive vice president of the Glidden Co., Cleveland, Ohio, told the National Farm Chemurgic Conference in Chicago in late March.

Mr. Lighter reported for the task group for oilseeds and animal fats of the President's bipartisan commission on increased industrial use of agricultural products, of which he is a member.

He said a program of developing greater markets for fats and oils would be a positive benefit to the farmer "and the cost to the taxpayer would be small."

"It is important that the President's commission recognize that the most significant change in the pattern of domestic farm production over the past 2 decades has been the phenomenal expansion of oils and fats production in the United States," said Lighter.

"The primary single crop responsible has been the soybean. The 1956 crop set a new record of 456 million bushels. This record crop in 1956 required nearly 22 million acres of cropland.

"Most of this acreage was in the central Cornbelt. If planted to corn this acreage at an estimated yield of 70 bushels per acre would have produced 1½ billion bushels of corn or would have increased an already surplus crop by over one-third.

"So far the government has never shown a loss on support programs for soybeans. Further expansion of soybean and other oilseed acreage is desirable.

"Each acre switched from corn to soybeans substantially reduces USDA price support dollar liability for that acre.

"The acre of corn produces some 2 tons of corn. The acre of soybeans produces 1,000 pounds of high protein feed and about 200 pounds of oil.

"Balanced feed rations will require far more protein than present and indicated potential production would supply.

Oil Versus Corn

"Thus, instead of storing price support corn at the rate of 2 tons per acre, acreage surplus in the form of oil is only 200 pounds to the acre. Should the additional oil ever prove to be in excess of demands, the cost to the taxpayer for removing the small 200 pounds of oil per acre is insignificant compared to the fabulous and continuing cost of supporting the same acreage in surplus grains. The key consideration, however, is the fact that export markets in volume do exist for fats and oils and that new markets can be developed in the industrial field. The oil would only need to be stored for a short period of time, if at all.

WILLARD C. LIGHTER

"The key to expanding industrial use of fats and oils is research. The committee strongly recommended that government research in oils and fats be directed to basic and fundamental research which is aimed at the acquisition of fundamental knowledge rather than the direct utilization of a material for a particular use or end product. Such fundamental information supplies a tool for all of industry to develop new end uses and products.

"The task group repeatedly was advised that the big difficulty in new uses for fats and oils was the lack of fundamental knowledge about such things as composition, component separation, and fundamental reactions.

"Very little work is being done to develop new uses for farm commodities. In fact, the number of people being trained for research in the field of fats and oils is so small that it would be impossible to implement any real crash program in fats and oils research.

"Quoting from a summary of current research supplied by the USDA and included in the appendix of our report:

" 'Possibly a dozen chemists are working on the use of fats in plastics. The petroleum chemical industry has

literally thousands engaged in placing their products in the same potential markets. No wonder agriculture is losing out.'

"Faced with a continuing farm surplus problem, it is inconceivable to the task group that our government should continue to expend vast sums of money for price support and storage activities and at the same time fail to furnish the funds and climate for effective new product research. The current battle for markets should not be turned over to the petroleum industry by default.

Expand on Broad Front

"To make an effort toward increased use of farm crops through fats and oils research, the task group believes that the USDA should expand research on a broad front, that this can only be done by increasing the pool of technical personnel, and that basic and fundamental research should be emphasized in government laboratories and in new use research work. To accomplish these objectives, they have recommended a program that will require 435 persons and will cost an estimated $6,075,000 annually.

"This is a tremendous percentage increase and because of the personnel problems, may be impossible of attainment. Yet it is small compared with the size of the problem, the total now being spent on surplus crops, or compared with any single petroleum research project.

"For new crops that will replace present surplus crops and for new uses and products that represent actual new outlets for farm production, the following incentives should be made a part of the law of the land:

"1—For laboratories, pilot plants, harvesting equipment, and new plant facilities, an accelerated (5-year) tax amortization.

"2—A tax free allowance comparable to that now authorized for the petroleum, mining, and natural gas industries. Such allowance to provide that 27.5% of the first sales value of new crops and new products approved by USDA be considered tax free for the first 10 years. Beginning with the 11th year, this allowance would be reduced by 2.75 percentage points each year.

"New agricultural products should have the benefit of tax incentives comparable to those granted the petroleum, mining and natural gas industries.

"The task group is convinced that if this program of research and incentives is enacted into law by the Congress, oilseed crops will grow rapidly. They can replace millions of acres of surplus crops.

"The cost to the U. S. government would be small. The new crops and products would be economically sound developments."

High Margarine Output

MARGARINE production in 1956 reached an all-time high of 1,369 million pounds, it was announced by Siert F. Riepma, president of the National Association of Margarine Manufacturers.

This represents a 2.7% increase over the previous year's production, which was 1,333 million pounds.

The former record annual production of margarine, established in 1954, was 1,364 million pounds.

"Consumer acceptance of margarine is increasing every year," Riepma declared. "With the continuation of aggressive merchandising, the availability of American fats and oils ingredients, and the possibility of a reduction in the amount of surplus butter being dumped into certain domestic markets at the expense of margarine, the outlook for expanded sales of margarine in 1957 is most promising."

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Cornell Man Notes

BIG IMPACT OF BEANS ON U.S. ECONOMY

THE NUMBER ONE reason for recently depressed prices of fats and oils is that the United States has shifted dramatically in the last 20 years—from having been a major importer to its present status as the world's largest exporter, in the opinion of Herrell DeGraff of the Graduate School of Nutrition, Cornell University.

And the soybean crop is largely responsible for the changed position of the United States in the world's fats and oils economy.

DeGraff spoke before the National Institute of Animal Agriculture at Purdue University Apr. 9. He stated that in 1935-39 this country received as net imports 20% of its total supply of vegetable and animal fats. In 1956, by contrast, our net exports were 28% of our production.

DeGraff said fats and oils are now selling at only two-thirds of their prewar price in terms of constant dollars. We are on a permanently lower relative price basis for fats and oils, in his opinion.

"Adopted into the agriculture of the Midwest, the soybean has had nothing short of a revolutionary effect on the fats and oils economy of this country—and a very important effect on the whole world.

"Soybean people have had the courage and wisdom to avoid price supports at levels that would bring the crop under production controls. It has been free to compete—which is an important part of why it has competed so successfully.

"Our soybean oil production last year, including the oil equivalent of soybeans exported, reached the almost startling figure of 43% of all the edible fats and oils we produced. USDA has estimated that the soybean will continue to gain against other fats—and within 5 years may be producing over 50% of our total edible fats and oils.

"As recently as 1950, cottonseed oil was the number one ingredient in margarine. Soybean oil has displaced it—and last year was used in a ratio of almost three to one over cottonseed oil. Similarly it has gone far ahead of cottonseed oil in the manufacture of vegetable shortenings.

"Both of these vegetable oil products in which soybean oil has figured so strongly have been increasingly competitive with butterfat and lard—our two most important animal fats.

"In the production of salad oils and cooking oils the soybean product has again moved in—in competition with cottonseed, peanut, and corn oils. And now soybean oil is increasingly invading the drying oil category, in competition with linseed oil.

"Important as soybean oil is to our agriculture and food supply, perhaps soybean meal is even more important. Data developed by USDA indicate that supplies of high-protein feeds per animal unit have doubled since prewar. This fact can hardly be overestimated in its importance to the efficient use of feed grains and to the output of animal-product feeds.

"The rising supply of high-protein feed has been possible only because of the soybean. Production of soybean oil meal rose from 1 million tons a year before the war to 8 million tons last year—and it is now over 50% of our total supplies of all high-protein feeds.

"Export opportunities plus further expanding use of protein meals in our own livestock production seem likely to keep this road open also for even more soybeans in the years ahead.

"What further increases in soybeans will mean to other fats and oils — both vegetable and animal, both edible and inedible—is not entirely clear. The way things look now:

"1—Milk-solids-not-fat will have to carry more of the burden of milk price in the future, because butterfat will carry less, and

"2—Red meat likewise will carry a larger share of livestock prices because lard and tallow will carry less."

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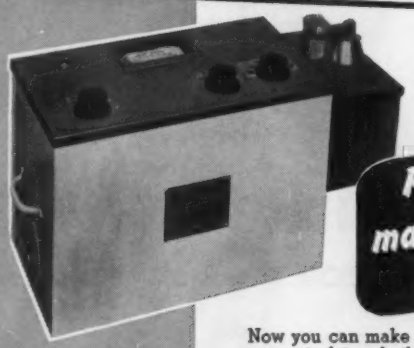

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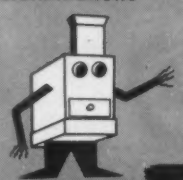

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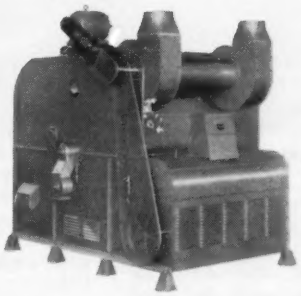

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CONGRATULATIONS! George Volger (left), president of the Chamber of Commerce, and James F. Kent (right), chairman of the C. of C. industrial development committee, congratulate Donald C. Ogg of Iowa Soya Co., Inc., on the rapid construction of the new vegetable oil river terminal at Muscatine, Iowa.

River Terminal By Iowa Soya Co.

MISSISSIPPI RIVER transportation in the Muscatine, Iowa, area will be substantially increased according to an announcement made by James H. Kent, chairman of the industrial development committee of the Muscatine Chamber of Commerce. Construction has begun on a 210,000-gallon vegetable oil storage tank which will be a part of a new terminal and dock facility constructed by Iowa Soya Co., Inc., of Redfield, Iowa.

Kent reported that the announcement was authorized by Donald C. Ogg, vice president and general manager of Iowa Soya. John Jacob Vanier of Salina, Kans., is president and treasurer of the company. The firm operates a soybean processing plant at Redfield.

Dock, Warehousing Facilities

Pending approval from the Corps of Engineers, a dock with a front footage of 150 feet will be constructed on piling outside the river levee. The dock will support a warehouse containing approximately 6,000 square feet for commodity storage. When constructed, the dock will be used in connection with the transportation of soybean products including soybean oil and meal. The dock will be built in the vicinity of the Acme Fuel and Materials Co., which will have access to the dock for loading construction materials.

Both design and construction of the terminal are under the direction of Lee I. Osborn, marine and general contractor of Muscatine.

Future Expansion

In discussing future plans, Mr. Ogg stated, "At the moment, we are only certain that we have selected the most logical site for a river terminal operation. However, plans for other diversified processing operations are definitely under construction. Muscatine has much to offer as a location for a processing industry."

Ogg stated that shipments by barge would begin early in April with temporary facilities until the permanent construction is completed later in the summer.

Asks Repeal of Minn. Margarine Laws

BILLS BEFORE the Minnesota legislature that would place soybean oil on the list of permissible ingredients of margarine sold in Minnesota have been applauded by Siert Riepma, president of the National Association of Margarine Manufacturers, Washington, D. C.

But Riepma said that S. 1342 and H. 1489, identical bills before the Minnesota Senate and House, also point out the need for complete repeal of legal prohibitions and taxes on margarine in Minnesota.

In a letter to Minnesota's Lieutenant-Governor Karl F. Rolvaag, Riepma recalled that soybeans are the second ranking cash crop in Minnesota, and that the state is the nation's second largest producer of soybeans. He quoted a University of Minnesota news release to the effect that Minnesota farmers are producing more raw material for margarine than they are for butter.

Under present law, soybean oil is not a permitted ingredient in margarine sold in Minnesota.

"It is to be regretted that the bills before your distinguished committee do not remove the existing restrictions against the sale of margarine in Minnesota," Riepma stated in his letter to Rolvaag.

"The state law prohibits the sale of colored margarine, imposes licenses with annual fees of $3 per year on retailers, wholesalers, and manufacturers, prohibits margarine's use by state-supported institutions, and imposes a 10¢-per-pound tax on the white product when it contains more than 15% product weight of certain oils other than animal fats.

"The present bills attempt to recognize the importance of soybeans by permitting soybean oil to be used in margarine but subject to the 10¢-a-pound tax if employed in volume over 15%. In other words, these bills would simply bestow upon soybean oil the right to be taxed when used in margarine, a pure and nutritious food."

The bills have been passed by the legislature and signed by the governor—EDITOR.

Lee Outyields Jackson

A TWO-TO-ONE yield advantage for the Lee variety over Jackson and Roanoke was demonstrated by a Prairie County, Ark., farmer in 1956, according to Delta Farm Press.

L. F. Seidenstricker of Devalls Bluff planted all three varieties in 12-acre plots in the same field on July 4 following oats. The beans received no fertilizer or irrigation.

The yields: Roanoke 10 bushels per acre; Jackson 8; and Lee 20.

On 140 acres of Lee soybeans that were irrigated, Seidenstricker harvested an average yield of 37 bushels per acre. These were planted in 30-inch rows in June.

Seidenstricker says he obtained better yields from beans irrigated by the gravity or furrow method than he did from flooding.

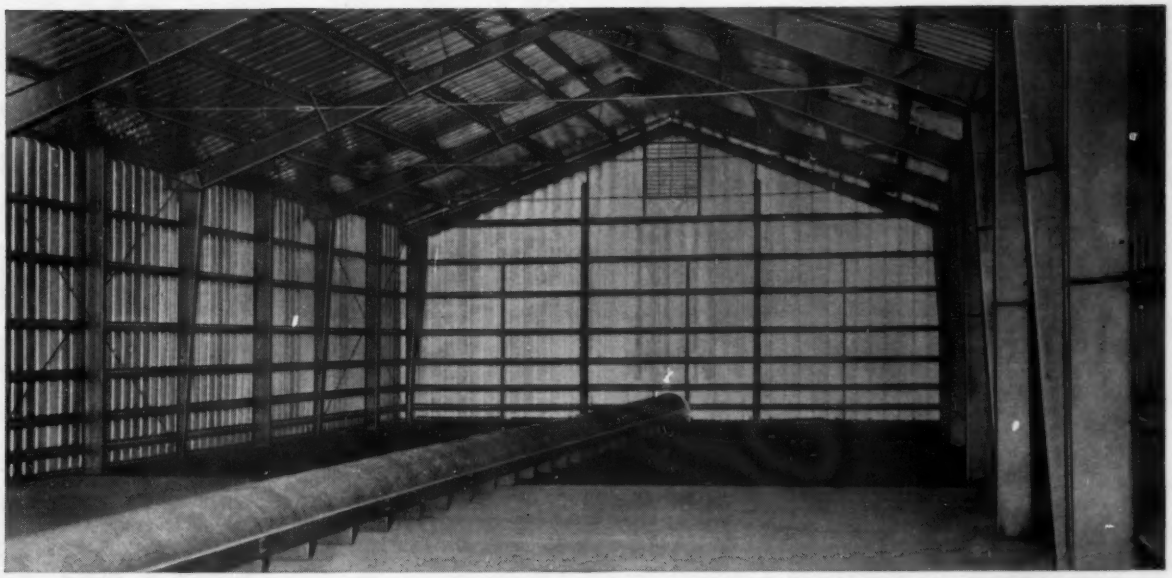
He is sold on the idea of planting in 30-inch rows. He states that grass is much easier to control, fewer cultivations are required to keep down grass and weeds, and more moisture is conserved when the rows are close together and the beans shade the ground quicker than when wider rows are used.

Margarine in Canada

CANADA produced 124.7 million pounds of margarine and 157.2 million pounds of shortening in 1956, according to the Dominion Bureau of Statistics, Ottawa. Compared with 1955, margarine output declined 387,000 pounds but shortening was up 3.5 million pounds. Production of refined oils (coconut oils and salad and cooking oils) at 42.1 million pounds was 5.9 million pounds larger than in 1955.

About 79% of the oils and fats consumed in the margarine industry in 1956 consisted of vegetable oils, 17% of marine and fish oils and 4% of animal fats. Soybean oil made up the largest single item, representing almost 42% of the total.

Over one-half of the oils and fats used in the shortening industry was vegetable oils, over one-third animal fats and the remainder marine and fish oil.



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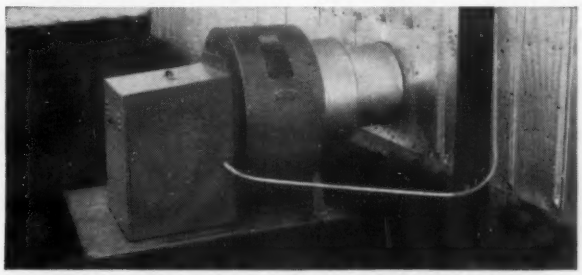

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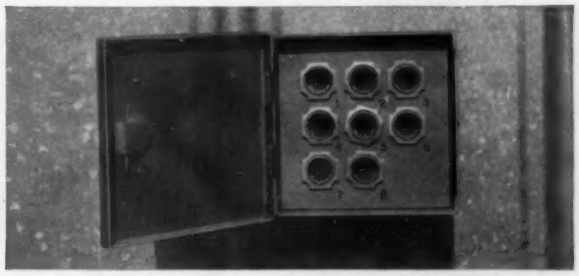

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Calculated on a 40-acre field Alanap-3 can give you these gains:

Increased Yield	Cost Alanap-3	Gain
$870	$168	$702

At the same time, order your soybeans treated with Spergon—the best protectant against "damping off" and other fungous diseases so rampant in cold, wet planting weather. *Or* order your Spergon early and treat the seed yourself.

Here are the economics of Spergon-treating enough seed to plant a 40-acre soybean field:

Agronomy Journal, Oct. 1956, article entitled "Effects of Annual Weeds on the Growth and Yield of Soybeans". †"Current Price Average"

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Calculated on a 40-acre field, Spergon can give you the following gains:

Increased Yield	Cost Spergon	Gain
$180	$12	$168

Now look at your total possible gain from use of Spergon-treating and Alanap-3 weed control:

Gains 40-acre field

Alanap-3	Increased yield	$870	Cost of Alanap-3	$168	Gain	$702
Spergon	" "	180	" " Spergon	12	"	168
	Yields	$1050	Cost	$180	"	$870

Total possible combined gain—$870 per 40 acres or $21.75 per acre. Order your Alanap-3 and Spergon early. Send for your free copies of booklets giving full information on use. OR visit your nearest dealer.

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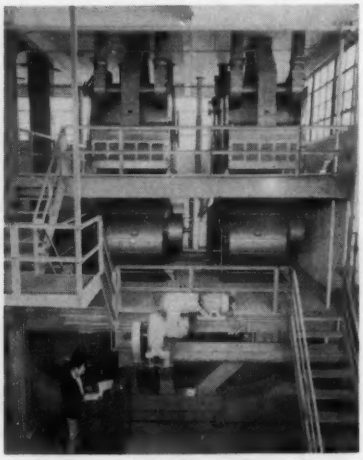
NEW PROFILE on Memphis horizon is soybean oil-and-meal plant just completed by Cargill, Inc. Bins at rear store 2 million bushels, headhouse at left has storage for 200,000 bushels, preparation plant is white building with mass of roof-top ventilators, extraction is accomplished in grey building to right, and edge of office building shows at far right.



THREE FLOORS HIGH, processing equipment stands in the preparation plant of Cargill's new soybean installation in Memphis. Shown above are dehulling "aspirators" that remove the tough outer covering from the beans preparatory to their being cracked, flaked and conditioned for extraction. On the ground floor, an inspector makes notes on the operation of the new equipment.

Cargill Opens at Memphis

One of Cargill's nine vegetable oil plants, can process 8.5 million bushels annually and boost South's soybean crush

A MULTIPURPOSE soybean installation that will boost the South's total soybean crush by 15% to 20% was opened at Memphis, Tenn., Apr. 9 by Cargill, Inc.

The new facility—an extraction, storage, shipping and merchandising center—includes a solvent-type extraction plant capable of converting 8.5 million bushels of soybeans yearly to 12.5 million gallons of oil and 200,000 tons of meal; large storage tanks for receipt of 2.2 million bushels of beans; loading and unloading facilities for trucks, river barges and rail and tank cars; and equipment for bulk pelleted and "packaged" handling of 44% to 50% protein meal.

Fred M. Seed, vice president in charge of Cargill's vegetable oils division, said the new installation "will directly influence both agriculture and industry in the primary supply-and-distribution area of Tennessee, Arkansas and Missouri, and in a distribution-only area which includes Texas, Louisiana, Mississippi, Alabama, Georgia, Florida and California. Southern crushing capacity —at present some 35.5 million bushels annually—will be increased up to one-fifth.

Distant Markets Reached

Cargill's plant is located in Memphis' new President's Island industrial community, a 7,800-acre development on the Mississippi River's largest island, 4 miles from Memphis and connected to the city proper by causeway. A "still water" harbor at the plant site enables river barges to load oil, beans or meal for direct water shipment throughout the inland waterway system, or for transshipment by water to Gulf Coast states or into export.

Meal and oil from Memphis will move within the waterway system to Alabama, Louisiana, Georgia, Texas and Florida, Seed said. In export, the strongest present markets for meal exist in Germany, Holland and Denmark, and for oil in Spain, Italy and northern Europe.

"In economic terms, the new plant will put southern farmers nearer domestic and world markets than ever before," he said.

As an example of the economy of water transport in domestic markets, he pointed to the 575-mile route through the Mississippi, Ohio, Kentucky and Tennessee rivers from the new Memphis plant to markets in Guntersville, Ala. "In terms of miles, the water route is almost three times as long as the overland haul, but in terms of economic transport of bulk commodities, it is by far the cheaper way."

In the Tennessee-Arkansas-Missouri area, the new plant will further encourage the growing of soybeans, and will also stimulate the area's growing prepared-feeds industry.

"One of the most important aspects of today's southern economy is its remarkable increase in livestock numbers, especially poultry, and the expansion of the prepared-feeds industry which serves livestock raisers," Seed said.

Physical Plant

The new soybean installation is part of a larger Cargill system with facilities throughout the agricultural United States. Included in it are nine

ROTARY COOLER at Cargill's new soybean plant in Memphis receives soybean oil meal after the oil has been extracted and the meal toasted. Here interior construction is given a final check before hot meal is introduced and the cooler begins revolving.

vegetable oil plants—soybean, flax and copra; 14 formula feed plants in its Nutrena Mills division; 45 terminal grain elevators at interior and coastal points, some 50 smaller country elevators, and an extensive transportation division with facilities for rail, truck and barge hauling.

The Memphis addition to Cargill comprises four 500,000-bushel steel elevators and an 11-bin cement headhouse containing 200,000 bushels; oil storage tanks with a 380,000-gallon capacity; a large bean preparation plant in which beans are hulled, flaked and "conditioned" under high temperatures for the extraction process; an extraction plant in which a hexane solvent process removes the oil from the beans; recovery equipment to separate the oil from its solvent, and flakers, sifters and a large pellet mill to prepare the meal for distribution.

The extraction plant contains, as its central piece of equipment, a giant perculator-like "rotocel" 31 feet in diameter in which hexane solvent "percs" through the flaked beans. The hexane absorbs soybean oil in much the same way that hot water absorbs coffee, then is drawn from the rotocel for separation from the oil in large evaporating equipment.

Management of the new soybean installation includes Lee D. Canterbury, manager of Cargill's Memphis office; James Spicola, in charge of soybean purchases and meal sales; and Virgil K. Behaunek, plant superintendent.

Soybean Meeting Held at Tallulah, La.

AN AREA-WIDE meeting of persons interested in the soybean industry was held at Tallulah, La., Apr. 11, with Tom Hall, Washington, D. C., chief, general crops and grain division, Federal Extension Service, the featured speaker.

The Louisiana Delta Council and the Agricultural Extension Service co-sponsored the meeting, the purpose of which was to provide a better understanding of the grain business and to assist in developing a sound soybean industry in Louisiana.

Walter Scott, Jr., and Warren Patrick, prominent Tallulah producers, served as co-chairmen.

Lloyd Gravin, manager of Cargill & Co., Baton Rouge, La., spoke on the place of the terminal elevator in the soybean industry. Maxwell Yerger, Tallulah, discussed the importance of cottonseed oil meal.

Questions and answers concerning soybean variety and cultural practices were handled by Dr. John Gray, agronomist, LSU Agricultural Experiment Station, and A. G. Kilgore, associate agronomist, LSU Agricultural Extension Service.

Harvey Grant, secretary-manager, Louisiana Delta Council, discussed the need for a coordinated production and marketing program.

Soybean producers and elevator operators from the parishes of Ouachita, Caldwell, Morehouse, West Carroll, Richland, Franklin, Concordia, East Carroll, Madison, and Tensas attended the meeting.

Mr. Grant states that because of the widespread interest evidenced in the recent soybean program it is now planned to develop similar area-wide meetings as annual events for the northeast Louisiana Delta.

Keep Beans off Land Infested by Nematode

FARMERS CAN do themselves and their neighbors a service by not planting soybeans or soil-bearing root crops this spring on land infested with the soybean cyst nematode, according to the U. S. Department of Agriculture. Soybean plants furnish food for the pests, and root crops that move off the farm can spread nematode-bearing bits of soil.

This devitalizing pest has been found so far in North Carolina (two counties), Missouri (one county), Tennessee (two counties), and Arkansas (one county).

Soil can carry the speck-sized nematodes unnoticed from infested farms. The best way to prevent spread from such farms, scientists of USDA's Agricultural Research Service believe, is to avoid planting crops that the pest can develop and feed on (soybean, lespedeza, common vetch, or snap beans), or that generally move off the farm with soil attached (such as tomato seedlings, bulbs, or root crops).

Soil clinging to farm tools, machinery, vehicles, used sacks, boxes, or crates can also carry the nematode. Washing or otherwise cleaning soil from such articles helps to reduce the hazard of spreading the pest.

The soybean cyst nematode, a native of the Orient, was first recognized in this country in 1954, in the Castle Hayne area of North Carolina. Yellowing and stunting of soybean plants may indicate that it is present, but positive identification requires a nematologist's trained eye. This threadlike eelworm attaches itself to soybean rootlets and sucks the plants' juices. It can cause total destruction of a soybean crop.

During the growing season this year, extensive federal-state surveys will be conducted in this country's main soybean-producing areas. They will seek to establish more certainly the outer limits of known infestations of the soybean cyst nematode and to find out whether the pest is present in other areas. Preliminary plans call for establishing a central laboratory at Memphis, Tenn., where suspected nematode cysts can be sent for examination.

Outlook for Smaller Canadian Acreage

CANADA'S OILSEED crops are expected to set new records in 1957 even though soybean and sunflower seed acreage intentions show declines from 1956, according to Foreign Crops and Markets.

Canadian soybean plantings this year are expected to be down about 5% from 1956, and down about 15% from the record acreage of 1954. Soybean output in 1956 was 4.9 million bushels.

Canadian farmers intended to increase their plantings of flaxseed, rapeseed, and mustard seed, as of Mar. 1.

Soybean acreage intentions, Canada, as of Mar. 1, 1957, compared with estimated acreage, annual 1954-56[1] acres

Seeded acreage			Intended acreage	1957 as percent
1954	1955	1956	1957	of 1956
254,000	214,000	228,000	217,000	95

[1] Ontario and Manitoba only; small acreages are grown in other provinces. Source: Dominion Bureau of Statistics, Ottawa.

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Lecithin — Is it a miracle substance?

Reprinted from Archer-Daniels-Midland Co.'s Archer

FOR APPROXIMATELY 20 years, Archer-Daniels-Midland Co. has been manufacturing and marketing the product which probably comes closest to being a "wonder drug" and the world's most versatile commodity.

Actually, lecithin is not a drug but a natural substance found in almost all living cells, especially nerve cells and the brain. It is also present in eggs, nuts, grains, seeds and dairy products. Lecithin forms about 2¼% of the dry material of an egg yolk, which provides the richest source of the material in the human diet.

Lecithin belongs to a group of substances chemists call phosphatides and which are described as occupying a position between fatty oils and proteins. The lecithin molecule has a Jekyll and Hyde personality. One part is attracted to water while the other part is attracted to fats. This mixture gives lecithin collodial and emulsifying properties that make it useful in industries ranging from confections to cosmetics.

As far as the individual is concerned, lecithin holds wonderful possibilities as a "health-giving" substance. A variety of human ills has been alleviated or even cured after several weeks or months of taking lecithin regularly.

For Heart Disease

A complex, phosphorized, fatty material, lecithin contains a substance called choline which is regarded as a vitamin. A Toronto doctor proved that when choline is present in the body in sufficient amounts, it removes excess fats from the liver. Ordinarily, there is not enough choline in the human diet to make the liver function at its best. Choline in lecithin may help in the proper disposition of body fats.

Lecithin also contains inositol which exists in all body cells. Since the material is an emulsifier it is believed that it aids the blood in carrying fats. In younger people blood returns to normal about 3 hours after a meal of fats. Experiments have shown that older people retain fats in the blood for a longer period of time, thus providing more time and a better chance for fats to deposit in the tissues. Such deposits, called cholesterol, cause hardening of the arteries and high blood pressure.

When cholesterol forms on the inside of the main arteries leading from the heart, they can partly close off the blood stream and cause coronary thrombosis. Should a piece of the deposit break loose and enter the bloodstream, it may reach the heart and cause death. It is thought that lecithin emulsifies excess cholesterol and reduces extra deposits to normal. If high blood pressure is due to cholesterol deposits, some authorities believe lecithin will cause blood pressure to return to normal.

In some cases lecithin has raised low blood pressure to normal, improved or helped in curing cases of arthritis and rheumatism and even helped early, mild cases of diabetes. When used as a dietary supplement, lecithin has aided in alleviating malnutrition and in building resistance to disease. Very possibly the human diet has changed so much that people today do not get the amount of lecithin required for the metabolism of food. Perhaps, after the age of 50, we need an extra boost.

Lecithin affects what we eat, what we wear and many of the articles and products we use every day. In manufacturing chocolate, lecithin reduces cost and at the same time improves the quality of the chocolate. Lecithin causes fat in chocolate to spread evenly, thus reducing the amount of cocoa butter necessary in production.

Added to margarine, lecithin improves baking and frying qualities of the final product and makes a more uniform distribution of water throughout the fat. It permits margarine to froth and brown during frying like actual butter. One of the first uses of lecithin was its addition to margarine. When added to butter in larger amounts, lecithin improves butter flavor. It was known that butter actually contained lecithin, but the product was destroyed in processing margarine. Egg yolk was first added to margarine to give it the qualities of butter. Now lecithin does the same job more efficiently and economically.

In bakery goods such as cake, cookies and packaged biscuits, the addition of lecithin increases baking volume and improves texture. Lecithinized bakery goods require less fat, and freshness is preserved far beyond the normal period because fat oxidizes less rapidly.

Unlimited in Industry

Industrially, the uses of lecithin are unlimited. Added to paints and printing inks, it improves dispersion of pigments in vehicles and retards pigment settling.

Among other things, lecithin increases the efficiency of soap because of its emulsifying powers; serves as a softener and facilitates mixing in the production of rubber products; produces more even dyeing, greater color brilliancy and improved flexibility in dyeing fabrics.

Soybean oil contains from 2 to 3% lecithin. The ingredient interferes with many commercial uses of the oil and is therefore removed by a steam process treatment. At first lecithin was considered a waste product, but many uses were subsequently discovered. It became inexpensive and available in quantity through commercial development.

Crude soybean oil undergoes a degumming process and the resulting lecithin is a golden brown, viscous fluid.

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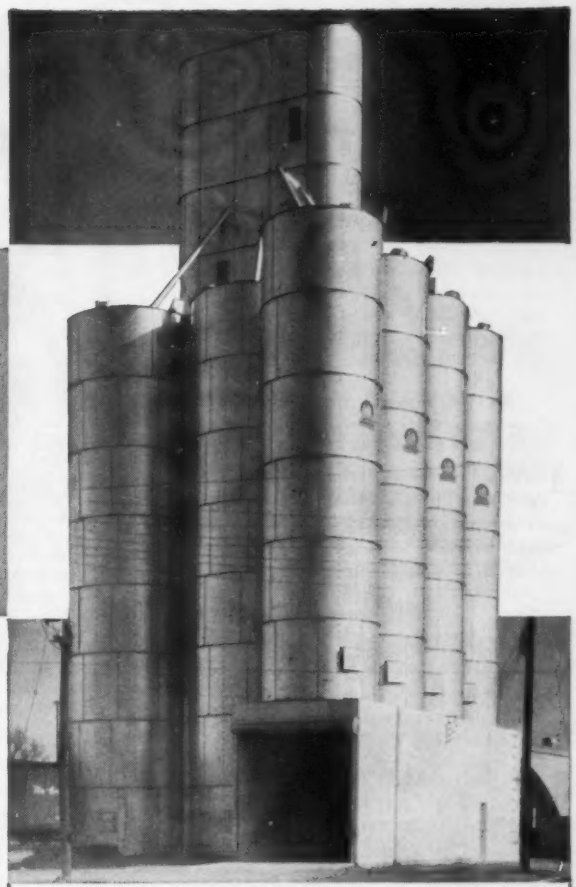

Another Columbian *"New Look"* Installation — Riverdale Grain Company of Riverdale, Nebraska, took this modern Columbian way to meet today's problems. Columbian designed and master-crafted this 60,000 bu. storage capacity elevator with four main tanks 15' x 61', and four tanks 12' x 48' for blending and classifying with an all-steel 9' x 24' x 43' headhouse. (Columbian also builds modern steel elevators with capacities well over 300,000 bu.)

With today's harvesting time counted in weeks instead of months, speedy grain handling in a modern elevator is of vital importance. Large capacity may not be necessary if your elevator is highly efficient and modern . . . equipped for fast classifying and blending of grains.

Riverdale Grain Company's new Columbian all-steel elevator at Riverdale, Nebraska is an example of what you can do with relatively small capacity and high efficiency. The new 60,000 bu. capacity elevator, with 4 main tanks, 4 classifying and blending tanks and a headhouse is a "working house".

The new wider driveway and arrangement of tanks provides faster unloading, less waiting time for customers. With the elevator's services to growers and shippers expanded, Riverdale's old elevator adjoining, is still available for long storage or emergency capacity at peak demand.

With such a modern Columbian bolted steel elevator, the small operator can meet the competition. Without it, the time is fast approaching when grain growers will pass him by for those who can handle his grain faster, store it more safely and efficiently. Columbian bolted steel elevators meet and comply with the new sanitary requirements for rodent-free, vermin-free storage. They provide fire safe construction with the *extra* strength of steel.

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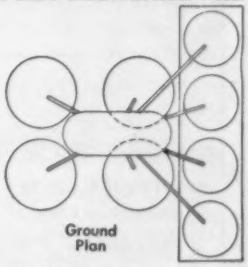

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U. S. and Canadian Soybean Prices

Use of the Chicago futures market in Ontario.

An address before the Ontario Soybean Convention.

By HOWARD H. PITZ
Manager, Grain Marketing Division, United Cooperatives of Ontario

I QUOTE some statistics to point up the tremendous effect the American soybean industry can have on world markets and prices as compared with other countries.

	U. S. production	Canadian production	World production
	(Million bushels)		
1953	268	4.4	651
1954	341	5	716
1955	371	5.5	760
1956	456	5	854

You will note U. S. production increased 85 million bushels last year alone. In 1955 Asia produced 383 million (China and Manchuria 330 million) leaving very little production in other countries. United States, then, produces just about one-half world production and in 1956 very likely exceeded this volume. She is also the world's largest exporter and will probably remain so as she is aggressively developing outside markets through the industry itself and with government aid.

U. S. exports (million bushels)
1954 — 60
1955 — 65
1956 — 75 (Est.)

Of the 60 million exported from the 1954 crop, 8 million went to Canada, 20 million to Japan. She also exported the equivalent of about 5 million bushels in oil and 11 million bushels in cake and meal that year.

These facts will help us to visualize the dominant position the United States holds in the soybean industry, and at the same time make us realize the relatively small part we in Ontario play in this industry. A like comparison could be made for other Ontario cash grains. Added to this, U. S. production is concentrated in states close to our borders which are our closest source of outside supply.

U. S. beans enter Canada duty free, rail rates from say Toledo to Toronto are only slightly higher than from Chatham to Toronto and water rates are competitive. Also, at the present time, American funds can be purchased at a discount of around 4% which at today's prices works out to about 10¢ per bushel.

I should hasten to add that there are good reasons why our processors prefer home-grown beans. First, because they are a Canadian product and in spite of what they sometimes tells us, are a better quality because they are handled better. Second, to comply with British regulations governing preferential tariffs on exports of oil and meal to that country, and third, for milling in transit privileges.

Canadian exports for the calendar year 1956

Beans	1,407,000 bus.	(Mostly to U.K.)
Oil	4,185,000 gal.	(U.K. 1,323,000 gal.; Netherlands 2,417,000 gals.)
Oilcake and meal	4,939,000 cwt.	(Mostly to U.K.)

Canadian imports for the 12 months ending October 1956

Beans	9,078,000 bu.	(From U. S.)
Oil	173,000 cwt.	(From U. S.—relatively small)
Oilcake and meal	4,121,000 cwt.	(From U. S.)

It can be seen that the U. S. crop and marketing conditions are all-important to the Ontario producer in determining at planting time what returns he can reasonably expect from soyas in relation to other cash crops and again in determining when to sell.

Mainly because there have not been any burdensome carryovers of soyas under U. S. government control the U. S. support price for soyas has been very effective. The average farm support price for the 1956 crop was $2.15. The 1957 crop has been set at $2.09. The Chicago equivalent of these prices is about $2.37 and $2.31 respectively. It is interesting to note that the season's low for Chicago March futures to date is $2.37 or about the Chicago equivalent of the 1956 support price.

Because we are large net importers of soyas which enter duty free from the United States and for the other reasons I have mentioned, it is natural that our processor bids are based directly on the Chicago futures market. More important, we have no Ontario grain exchange for soybeans, or for that matter for any other Ontario grain crops.

Because domestic processor bids are based directly on the Chicago

Duties on Soybeans, meat and oil of various origin.

Duty	Beans	Oil	Meal
U. S. to Great Britain	5%	15%	10%
U. S. to Canada	Free	(Edible 20% Manufacturing free)	Free
Canada to Great Britain	Free*	Free	Free
Canada to U. S.	2c lb.	3½c lb.	3/10c lb.
Canada to Holland and Belgium	Free	(5% crude 10% other) plus 5% to Holland	Free

* Provided a certain percentage is of Canadian origin.

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market, the processor, local dealer and broker are able to hedge positions with a minimum amount of risk and thus the Ontario soybean producer always has a market for his beans. This cannot always be said of other Ontario grains, prices for which are not based directly on the grain exchange.

Under the circumstances I have mentioned, the U. S. support price is fairly effective as a floor price for our crop and since our processors will pay, under normal market conditions, as much or more for our beans as U. S. imported beans would cost and since we can also export beans, we are fairly well assured of at least competitive prices.

Projecting this assumption to the 1957 crop, we could say that Ontario producers would not likely receive much less than $1.98 for beans based as follows:

Average support	*$2.09*
Chicago equivalent	*2.31*

Processor bid to local dealers 25¢ under the Chicago future option plus dealers handling cost of 8¢ equals $1.98. Processor spreads under the Chicago options vary dependent on the cash market and have ranged from 25¢ to 30¢ to the present low spread of 9¢ under Chicago May. The maximum dealer handling cost is fixed by negotiation with the Ontario Soyabean Growers' Marketing Board and is presently 10¢ per bushel.

Because of this close relationship to the Chicago futures market, the Ontario soybean producer has at his disposal several ways to sell his crop during the year.

He may sell outright at harvest time.

He may store at home and sell outright any business day of the year.

He may store at his local elevator most any time and then sell outright any day of the year.

He may sell outright at any time, thus avoiding storage, interest and other losses and if he feels prices will be higher later on, may buy Chicago bean futures on margin.

He may contract his crop with his local dealer at a fixed price.

He may contract his crop with his local dealer at a fixed spread on the Chicago futures market, receive an advance with no interest or storage charges, then price out when he wishes.

Now I am sure anyone in the grain trade is willing, if not anxious, to fully explain any of these methods and to help in any way to provide general market information. As to which method to use or when to sell must remain the responsibility of the producer.

TROPICAL PLANTS closely related to soybeans are being studied at the University of Illinois by research workers with the U. S. Regional Soybean Laboratory. The plants have come from Africa, Australia and southeast Asia. Shown here is Richard Bernard examining one of the smallest plants. One of the tallest plants is shown in the background. These plants may have disease resistance that might be crossed into regular soybeans. Leaves and flowers of these foreign plants are similar to soybeans. The seeds form in pods but are much smaller than regular soybeans.

Soybean Lab in Study Of Tropical Plants

NINE SPECIES of tropical plants related to soybeans are being studied by research workers at the U. S. Regional Soybean Laboratory on the University of Illinois campus.

The researchers hope to find out how these unusual-looking plants compare with regular soybeans. These plants may have disease resistance that might be crossed into regular soybeans.

Richard Bernard, plant breeder at the soybean laboratory reports that species have been received from the Belgian Congo, Formosa, Australia, South Africa, Southern Rhodesia, Kenya, Malaya and Nigeria. The plants were received from scientists in these countries.

Leaves and flowers of the foreign plants are similar to those of regular soybeans. The seeds form in pods but are much smaller than regular soybeans. Most of the plants are perennial vines.

Duty on Soybean Meal

THE JAPANESE Finance Ministry on Mar. 1 notified the Custom Houses in regional areas to impose a 5% import duty on soybean oil meal effective Apr. 1, USDA's Foreign Agricultural Service reports.

A 10% tariff on soybeans, which for some years had been suspended, again became effective as of last Oct. 1.

During the calendar year 1956 Japan imported 7,665 short tons of soybean oil meal. It is believed the major portion came from the United States.

Nine agricultural products made up 95% of Japan's imports from the United States in 1956. They were wheat, rice, barley, corn, tobacco, hides and skins, soybeans, raw cotton, and tallow. Value of soybean imports was exceeded only by cotton and wheat.

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JAPANESE-AMERICAN SOYBEAN INSTITUTE

Soybean Market Project Now in Second Year

By SHIZUKA HAYASHI
Managing Director, Japanese-American Soybean Institute, Tokyo, Japan

CONTINUATION of the work of the Japanese-American Soybean Institute for another 2 years has been formally approved by Foreign Agricultural Service, U. S. Department of Agriculture.

During the first year of the operation which ended on Mar. 31, the activities of the Institute were concentrated mostly in the field of research including checking of arrival of cargoes to determine the average quality of U. S. soybeans, studying various aspects in connection with shoyu, tofu, oil processing and miso industries and others.

The most important achievement is in the improvement of the average quality of the beans arriving in Japan, especially in the percentage of foreign material which for the past season has been showing gradual improvement. A complete check covering every shipment of 1956 new crop soybeans arriving in Japan since November last up to March this year reveals that the percentage of foreign material averages well below 2%.

Thus the long repeated complaints by the Japanese consumers about the excessive foreign material content in U. S. soybeans have had results, and the fact of this improvement definitely offers relief as well as promise to Japanese consumers that all shipments that they will receive in the future will be delivered in similar or even better condition.

The impression made on the Japanese consumers of excessive foreign material has been so serious that not only great efforts are necessary to strive for the improvement of the quality but a certain length of time is required to eradicate this deeply rooted impression. It is hoped that continuous efforts will be made by American suppliers and authorities to win complete confidence of Japanese consumers in the quality of U. S. beans. Certain processors of soybean products such as tofu and miso makers are still objecting to foreign material but it may not be long before this problem will also be overcome.

All the work carried out by this Institute has been covered by complete reports made by this Institute to the American Soybean Association.

2-Year Project Started

The 2-year project has just started. The work of the Institute for the coming 2 years will be concentrated in educational and promotional work rather than in research. The 1-year experience in research and investigation has given the Institute an adequate base with which to henceforth carry out the necessary promotional work.

Beside carrying its own direct educational and promotional work the Institute has assigned a part of its work to two Japanese government agencies: the Japan Nutrition Association operated under the guidance of the Ministry of Welfare and the Food Life Improvement Association sponsored by the Ministry of Agriculture.

The work to be done by the Nutrition Association covers an educational and promotional program by which the government nutritionists belonging to the various health centers which number approximately 800 located all over Japan will be educated concerning the nutritional value of the soybean and soybean products. For this purpose classes will be held in various areas where these nutritionists will be called in from all the health centers belonging to each area.

These nutritionists after receiving lectures will return to their respective health centers where they will, in turn, give lessons and promote uses of soybeans and various soybean products to the direct organizations including women's associations, the farmers' associations, etc. Specialists in the various nutrition laboratories or institutions as well as professors of universities will be engaged to give lectures. The program calls for these classes to be held in Kumamoto, Hokkaido, Tottori, Fukui, Osaka, Kochi, Nagasaki, Aomori, Gifu, Tokyo and Wakayama.

The work assigned to the Food Life Improvement Association consists of holding promotional weeks for soybeans and soybean products in various important cities to educate the public to use more soybean products. Special sales for soybean products will be made during the week mostly at the department stores.

The extension week program will be held in Sapporo, Sendai, Tokyo, Nagoya, Osaka, Hiroshima and Fukuoka, in sequence during the coming several months.

Chinese Soybeans

The total quantity of Chinese soybeans purchased by various Japanese importers from China was 90,000 tons as of Apr. 15, at a uniform price of £38 f.o.b. China for shipment during April, May, June. This corresponds to $114.40 c. & f. Japan based on freight from China to Japan at $8 a ton.

New Office Quarters

To cope with the expansion of the work of this Institute the Institute will move into a new office room in the Nikkatsu International Building located in the center of Tokyo which gives most convenient access to not only the members but also to those interested in soybeans. After Apr. 20 our new address is: Room No. 410, Nikkatsu International Bldg., No. 1, 1-chome Yurakucho, Chiyoda-ku., Tokyo, Japan.

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For example, *soy carriers*, such as produced by Glidden, are fast replacing others in the manufacture of foods medicated with biotics, antibiotics, vitamins. Reason — high nutritional values not found in other carriers.

Edible soy flours are used in baby foods, cereals, prepared meats, pet foods, prepared mixes and many other foods because they add to nutritional value, shelf life, tenderness. *Industrial soy flours* serve as efficient, inexpensive plywood adhesives and wallpaper coatings. *Soy grits* is one of the principal ingredients used to balance nutritional value of pet foods.

Glidden is the leading soybean processor carrying operations beyond the crude products level to produce *special-purpose* derivatives that may help improve your product and reduce production costs. Call or write Glidden Technical Service for ideas and assistance.

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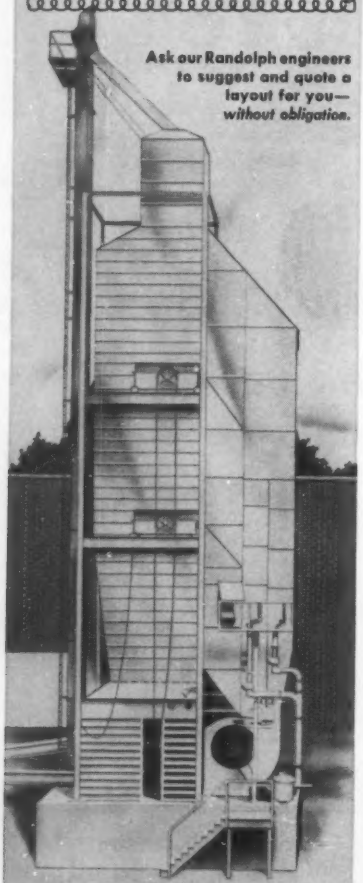

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PUBLICATIONS

Issue St. Lawrence Seaway Study

THE ST. LAWRENCE SEAWAY should make Chicago the nation's leading grain export center by the mid 1960's, it was revealed in publication of a comprehensive research study analyzing probable effects of the new waterway on U. S. grain marketing channels.

Sponsored cooperatively by the Indiana University School of Business and the Chicago Board of Trade, the study indicates Chicago grain exports will range from 80 to 110 million bushels annually if full potential of the seaway is realized and U. S. grain shipments abroad maintain their present volume.

Joseph R. Hartley, presently a lieutenant in the U. S. Air Force and formerly a university faculty associate, conducted the research under supervision of L. L. Waters, head of the school's transportation department, Schuyler F. Otteson, director of the bureau of business research, and W. O. Yoder, associate professor of marketing. Funds for the study were provided by the Chicago Board of Trade.

Based on present shipping rates, the Seaway will enable Chicago to draw grain competitively from as far as Enid, Okla., and the Rocky Mountains. This means that a major portion of the winter wheat belt and practically all of the main growing areas for corn and soybeans will be tributary to Chicago export facilities.

According to the study, large amounts of export grain now being shipped out of Atlantic and Gulf coast ports will go through Chicago and other Great Lakes ports instead. At present only negligible amounts of export grains are shipped from Chicago.

The seaway will provide savings of from 15¢ to 20¢ per bushel on grains going into export over existing eastern routes although it is anticipated that future competitive rate cutting could reduce savings to 10¢ per bushel. Hartley points out, however, that the cost advantage of the seaway will be so great that it is certain to attract most of the grain from its vast trade area.

It is estimated that total grain export shipments over the seaway route will run between 150 and 200 million bushels by 1966. Wheat will constitute most of this total, followed by corn and soybeans. Relatively small quantities of barley, grain sorghums, rye, oats, and flaxseed will move through the seaway.

The author states the total annual seaway volume of export soybeans might run as high as 50 million bushels by 1966 if Europe should consume more than 70% of our total exports—which he thinks is entirely possible. He thinks the United States should be exporting 95 million bushels of raw soybeans by 1966.

Hartley says soybeans have a stronger growth trend than any of the important U. S. grains. He expects this to continue and be matched by rising demand.

"The American soybean industry is in an exceptionally healthy position today," and "fundamental forces are strong for continued increases in our export volume."

The seaway is not expected to have any great impact on interior grain markets or on grain processing centers. There will be some tendency to locate processing plants at the head of the Great Lakes although the total is expected to be relatively light.

The Effects of the St. Lawrence Seaway on Grain Movements. Indiana Business Report No. 24. By Joseph R. Hartley. 252 pages. Indiana University School of Business, Indianapolis, Ind.

Ohio Soybean Production

SEVEN OHIO counties, all in the northwestern part of the state, each produced over 1 million bushels of soybeans in 1956, according to the Ohio crop reporting service.

Wood was the leading county with 2 million bushels, followed by Henry with 1.6 million bushels and Van Wert with 1.5 million bushels.

Other counties producing over 1 million bushels of soybeans in 1956 were Hancock, Paulding and Defiance.

Although average Ohio soybean yields in 1956 were slightly less than 1955, they remained close to the high levels of the two preceding years.

Henry County recorded 28.5 bushels per harvested acre, the highest in the state. Wood ranked second with 27.5 bushels, followed by Lucas and Miami counties each with 27 bushels.

In harvested acreage, Wood County ranked first with 75,300 acres, Paulding second with 67,100 acres and Van Wert third with 64,800 acres.

Other counties harvesting over 50,000 acres of soybeans in 1956 were Henry, Hancock, Putnam and Defiance.

The Ohio crop reporting service has issued county estimates for 1956 soybeans and other crops including acreage, yield and production.

Ohio Agricultural Statistics—County Estimates. Ohio Crop Reporting Service, Office of the Agricultural Statistician, 217 Old Federal Building, Columbus, Ohio.

TYPICAL plants from 1 foot of row. No fertilizer versus 200 pounds 0-9-27. Note difference in root and top growth. One of American Potash Institute slides.

Slides on Fertility

SETS OF colored 35-mm slides titled "Soil Fertility and Soybeans" have been distributed to educational leaders, and are now being offered for loan or sale.

These sets of 42 slides each were assembled by the Midwest staff of the American Potash Institute in cooperation with the National Soybean Crop Improvement Council, and many state and national leaders.

The set covers soil nutrition including liming, direct fertilization, rotational fertilization, and placement as well as other factors in production.

While a suggested script that accompanies the slides tells a fairly complete story, the set is designed to supplement local slides.

The set is available on loan for 10 days. When writing for it, please indicate when needed.

Additional slide sets of 42 and script can be purchased at cost, $6.

Write American Potash Institute, Inc., 423 Life Bldg., Lafayette, Ind.

Solvent Plant Safety

SAFETY IN solvent plant operations was the subject of six articles in the March issue of the Journal of the American Oil Chemists' Society. These articles summarize the safety symposium at last fall's meeting of the American Oil Chemists' Society.

The Society has established a permanent technical safety committee to solve such problems in solvent extraction plants.

Technical Safety Symposium. The Role of Personnel in Safety in Solvent-Extraction Operations, by H. D. Fincher, Anderson, Clayton & Co.; *Special Equipment and Operating Features Which Contribute to Safety in Extraction-Plant Operations,* by N. H. Witte and P. Kane, Central Soya Co.; *Safety Permeates All Manufacturing Operations,* by A. Earnest MacGee, Skelly Oil Co.; *An Approach to Safety in Solvent-Extraction Operation,* by W. F. Bollens, Swift & Co.; *Safety in Design in Solvent Extraction,* by R. P. Hutchins, French Oil Mill Machinery Co.; *Safety in Solvent Extraction from the Viewpoint of Insurance and Practical Operation,* by Odell J. Jones, Horace R. Belew, and Orville L. Williams, Western Cottonoil Co. Journal of the American Oil Chemists' Society, Vol. 34, No. 3, March 1957, pages 112-124. 35 E. Wacker Drive, Chicago 1, Ill.

Soybeans and Sorghum for Silage. By Charles P. Ellington. Fact Sheet 126f. University of Maryland, College Park, Md.

The Nematode Problem in Maryland and Its Control. By W. R. Jenkins and O. D. Morgan. Fact Sheet 120f. University of Maryland, College Park, Md.

LETTERS

Meal as a Plant Food

TO THE EDITOR:

How about some information in the Digest on soybean oil meal as a plant food?

I have been advised by a chemist in agriculture at the University of Illinois that it is about 10-4-0, an excellent lawn fertilizer. Have tried it and believe it has merit. Also an excellent food for plants that like an acid soil—azaleas, gardenias, camellias and others.

It could be packaged and sold through garden stores, also the five and ten. At the present time hereabouts the only place it can be found is at the elevators and only in 100-pound bags.

I believe someone is passing up a good bet.—*G. A. Carnahan, Champaign, Ill.*

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ELEVATOR
—engineered to perform at high capacities—outside or inside
Sturdy . . . weatherized . . . Built of extra heavy materials and parts—especially constructed to take it! The Super-Duty comes in a range from 600 to 6,500 bu. per hr. in lengths up to 150 ft. Larger legs are quoted upon application.
A. T. Ferrell and Co. also manufactures three other styles of elevators:
The "Standard" . . . patterned after the Super-Duty—built in lighter construction
The "Wood Line" . . . popular over many years where wood construction is preferred
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The trade has come to think of "Clipper" wherever quality, economy, capacity, endurance and service are expected.
Related Clipper products include:
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CLIPPER
CLEANERS • DRIERS and HANDLING EQUIPMENT
A. T. FERRELL & CO.
Saginaw, Michigan

GRITS and FLAKES . . . *from the World of Soy*

Opens St. Louis Office

The opening of a new **Central Soya** marine transportation office in St. Louis, Mo., and the appointment of David J. Conway as manager of its operation, has been announced.

David J. Conway

Mr. Conway, who is marine superintendent of the company's marine and truck division, will make his headquarters at 789 Arcade Bldg., 8th and Olive Sts., in St. Louis.

In making the announcement, Robert B. Parrott, vice president of the company's grain merchandising, said: "Our barge and towboat operations extend throughout the inland waterway system and the intercoastal waterway. St. Louis is the hub of shipping activities in this system, and we feel that this new location will let us use our facilities more effectively."

Mr. Conway joined Central Soya Co. as marine superintendent in 1955.

The formation of **W. T. Gartside Co.**, brokers in vegetable oils, 2546 Peterson Ave., Chicago 45, Ill., has been announced. Telephone is Chicago ROgers Park 4-9255.

An office for the buying and merchandising of grain in the Ohio area will be opened at Columbus by **Cargill, Inc.** Glenn A. Pritchard, Jr., formerly grain merchant at the company's Indianapolis branch, has been named manager of the new branch.

Eugene W. Anderson, Lincoln, Nebr., has joined **Archer-Daniels-Midland Co.** as a sales representative for Archer formula feeds in Nebraska and western Iowa. He was formerly associated with Crete Mills at Lincoln.

Secretary of Agriculture Ezra Taft Benson will be a featured speaker at the annual convention of the **National Cottonseed Products Association** at the Shoreham Hotel in Washington, D. C., May 21.

Eugene D. White has joined the sales division of **Werthan Bag Corp.** and will cover Mississippi and northern Louisiana. He will make his headquarters in Jackson, Miss. Mr. White has been sales engineer for South Central Plumbing & Heating Co., Jackson.

Byron L. Taylor has been named production coordinator for **Archer-Daniels-Midland Co.'s** flour and feed division. He moved to the purchasing department in Minneapolis from the Kansas City office in 1950.

Opening of a new animal feed sales office at Charlotte, N. C., to serve the livestock and poultry industry of the Carolinas and Georgia has been announced by Nutrena Mills, a subsidiary of **Cargill, Inc.** William P. Cameron, Jr., has been appointed sales manager for the region.

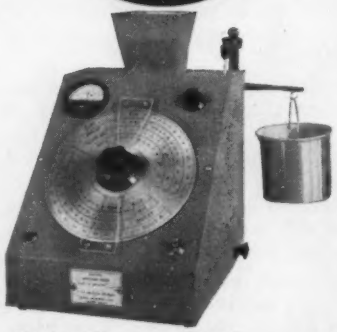
ELECTRONIC PROFIT CONTROL FOR THE SOYBEAN GROWER

The RADSON MOISTURE TESTER

Here's a machine to measure the moisture content of grain that is PORTABLE, ACCURATE and SENSIBLY PRICED. The RADSON will work from the cigar lighter of a car or truck, as well as 110 Volt A.C. It's designed for elevator accuracy, but it's still tough enough to go into the field. And it's priced low enough that it will pay for itself in very short order. For more information, write us at the address below.

A Few Choice Dealerships Are Still Available

$94.50 RETAIL PRICE



Direct reading . . . all grains . . . no charts needed. Versatile, portable, lightweight, designed for elevator accuracy, low priced, fully guaranteed. Models for 6 or 12 Volt D.C. or 110 Volt A.C.

RADSON ENGINEERING CORPORATION
MACON, ILLINOIS

Davidson-Kennedy V-P

Milton Rex Wingard has been appointed vice president-technical director and simultaneously elected to the board of directors of **Davidson-Kennedy Associates Co.**, designers and builders of chemical process plants and facilities.

Milton Rex Wingard

Prior to joining Davidson - Kennedy Associates in January, Wingard was project engineer, chemical plants division of Blaw - Knox Co., where he was in charge of sales and contract execution on all solvent extraction activities.

He also has had extensive experience in atomic energy, petroleum, petrochemicals, chlor-alkali, resins and plastics, wood utilization and general chemicals processes. He is best noted for his work in the development and plant design of processes for extracting vegetable oils.

In his new assignment he will direct market development activities including sales, advertising and contract negotiation.

The Midwest Grain Co., Hutchinson, Kans., has been purchased by **Dannen Mills**, St. Joseph, Mo. The acquisition brings the storage capacity of the Dannen firm to 17 million bushels. The purchase includes the Midwest string of country stations at various Kansas points.

A soybean processing plant at Virden, Ill., that has been closed down 4 years has resumed as part of the **Huegely Elevator Co.** operations. The Huegely firm leased the mill and elevators this year from Norman Hulcher after its own processing plant at Nashville, Ill., was destroyed by fire.

Henry Larsen is appointed assistant general works manager, tractor group, **Allis-Chalmers Manufacturing Co.**, Milwaukee, Wis. He has been assistant to John Ernst, tractor group vice president and general works manager, since late in 1955. He succeeds Owen J. Higgins who was recently appointed general manager of the Harvey, Ill., works.

Corn States Hybrid Service has moved to new headquarters at 803 Keo Way, Des Moines 14, Iowa. Telephone will remain the same, AT 8-7491.

Feed Sales Manager

Lloyd A. Winslow, well-known Midwestern feed sales executive, has been named manager of formula feed sales of the **A. E. Staley Manufacturing Co.**, Decatur, Ill.

Lloyd A. Winslow

Staley formula feed sales formerly were under the direction of Clyde W. Thompson, who is now manager, feed marketing services.

Winslow comes to Staley's from Aubrey, Finlay, Marley & Hodgson, Inc., Chicago advertising agency.

He has had previous experience with Moorman Manufacturing Co., Quincy, Ill.; Kasco Mills, Inc., Toledo, Ohio; and the Kellogg Sales Co., Battle Creek, Mich.

Dr. Spencer H. Morrison was recently appointed director of research for the feed and soy division of **Pillsbury Mills, Inc.** He has been director of technical sales since joining Pillsbury in 1954.

Dunkin A. Welte has been appointed elevator production engineer for **Central Soya Co., Inc.** He assumed his duties Apr. 15, with companywide responsibility for all phases of elevator operations. For the past 4 years he was operating superintendent of the New Orleans Public Grain Elevator. His office is at the company's headquarters in Fort Wayne, Ind.

The appointment of Thomas E. Doak to the position of oil buyer in the buying division of **Lever Brothers Co.** has been announced. He was formerly business economist for the firm of Longstreet-Abbott, commodity consultants, St. Louis, Mo.

The **Sharples Corp.** has announced newer and larger offices at 14700 Detroit Ave., Cleveland 7, Ohio.

Gerald L. Dennis has been appointed manager of field sales for Naugatuck chemical division, **U. S. Rubber Co.**, with headquarters at Naugatuck, Conn.

Appointment of Clyde W. Thompson to a newly created post in feed market development at the **A. E. Staley Manufacturing Co.**, Decatur, Ill., is announced. He has been formula feed sales manager since he joined Staley's in 1952. As manager of feed marketing services he will be responsible for developing and expanding the Staley Co.'s services to the industry and for development of long range plans of the feed division.

The **Day Sales Co.**, with offices at 810 Third Ave. N. E., Minneapolis, Minn., has been organized as a subsidiary of the Day Co. to engineer and install complete dust control and bulk material handling systems and sell industrial equipment manufactured by Day. It is staffed by former employees of the Day Co.

ADM Buys Drackett Protein Business

ARCHER-DANIELS-MIDLAND CO., Minneapolis, has purchased from the Drackett Co., Cincinnati, the latter's isolated soy protein business and all facilities located at Evendale, Ohio.

Announcement of the transaction, which will be effective July 1, was made by the two companies. The purchase price was not disclosed.

Acquisition of the isolated soy protein facilities will be another step in the diversification of ADM's operations, according to A. C. Hoehne, vice president and manager of ADM's soybean division.

R. G. Brierley, ADM vice president, will be responsible for operation of this new business under Hoehne's direction. The plant employs about 200 persons. Brierley said no organizational changes are contemplated.

Isolated proteins, on which ADM has done extensive research, are versatile ingredients of many industrial and food products. They are produced from soybeans by a series of chemical extraction and purification processes. Largest present use of the proteins is an adhesive in the manufacture of high grade printing papers, while another major market is as an emulsion stabilizer in water base paints. The proteins also have numerous applications in foods such as soups, icings, meringues and baby foods.

ADM has two other plants in Ohio, a chemical manufacturing facility at Ashtabula, and a foundry products plant at Cleveland. The company is one of the largest processors of agricultural commodities, ranking as a major manufacturer of vegetable oils, flour, chemicals, resins, industrial cereals, and plasticizers with 147 plants and elevators in the United States and manufacturing operations in several foreign countries.

SOYBEANS

"BABY" of the grain family!

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If YOU want to make money—BIG MONEY—out of SOYBEANS—WHEAT — CORN — COFFEE — COTTON — STOCKS—our twice-a-week TUESDAY and FRIDAY letters will give you EXPERT ADVICE backed by 38 years EXPERIENCE. We have been studying markets since 1918. Our service started business Feb. 1, 1928—now in 28th year!

SUBSCRIBERS WRITE: "Have taken over $100,000 profit out of commodity trades the past two years, because of your service." KANSAS.—"Your advices nearer correct than any I ever followed." GA.—"Best service I ever have taken." OHIO.—"I started on a shoe string—have made nice profits on your advice. Your service is TOPS." NEBR.—"Have subscribed to several commodity advisory services—honestly believe YOURS the BEST I have EVER seen." ALA.—"Your ACCURACY in forecasting is AMAZING to me." KANSAS.—"Find check for $25 for 3 months renewal.—You certainly hit every turn of the market right 'on the nose'. I stuck with another service for 6 months and lost $7,000. By using your advice I'm beginning to climb out." IOWA.—"Several people whose names I sent you are taking your service and MAKING MONEY. One made about $26,000 last year on $5,000 to begin with. Had to pay Uncle Sam $12,000, which 'hurt' him."—N. C. BROKER.—"A friend told me that on your advice during past 3 weeks he made over $5,000 on JULY soybeans." CALIF.—"Have taken thousands of dollars from the market on your advice—believe it entirely possible to average $1,000 per month." MICH.—"Had over 10 different services—must say YOURS TOPS THEM ALL.—If you get customers from Minnesota and Dakotas, that's a plug from ME. My year's renewal speaks for itself." IOWA.—Did so WELL on your MARVELOUS advice, here's $100 bill as 'thank you' present." MASS.

"Following YOUR market advices—tops in my opinion—have taken $5,000 profit in SOYBEANS in past 3 WEEKS." LA.

"Sure did WONDERFUL with that $5 subscription—OVER $3,000 PROFIT so far, and if I had gone along on first couple of letters, would have done much better." OHIO.

"Am another satisfied customer. Made enough on JULY beans, FIRST WEEK I took service, to pay for service REST OF MY LIFE, and I figure on living a LONG time yet." IOWA.

"In 28 years in grain business, YOUR commodity-stock service was FAR THE BEST used during that period." NEBR.

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Send EVERYTHING mentioned above via air mail. Enclosed $5.00 in full payment.

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WASHINGTON DIGEST

USDA Will Push Fats Exports Hard

By PORTER M. HEDGE

Washington Correspondent for
The Soybean Digest

A NEW BURST of activity on the part of USDA to move fats and oils into export markets is expected as soon as Congress extends Public Law 480. Passage is expected by not later than the middle of May, and probably sooner.

One observer here put it this way: "It's my impression that when the 480 bill goes through, the Department of Agriculture is going to get on its selling horse and ride in all directions."

This may be overstating the situation a little. Fats and oils have been moving well. March exports of soybean and cottonseed oils totalled approximately 190 million pounds. Total exports of the two oils through March reached 805 million pounds.

If just half that much more moves in the last 6 months of the marketing year, total exports will reach 1,200 million pounds against last year's 1,170 million. Exports are based on programs already announced. Probabilities are the total will go higher.

The large export movement doesn't fully reflect the present situation. April soybean stocks are at an all time high. Commodity Credit Corp. will have to take over a large volume of beans this year—something like 55 million bushels were still under support at the last estimate.

Announced policy is to sell at not less than support plus carrying charges for the balance of this season, ending Oct. 1. By that time new beans will be on the market. It's expected processors will take these and leave carryover beans in CCC hands.

Processing margins have narrowed. Both oil and meal prices are down. There is a great deal more soybean meal to move. Less meal is expected to be used during spring and summer.

Last year CCC had no inventory of soybeans, wasn't sure about size of the crop and waited until the August report to get rolling on exports. This year CCC will have nearly all of the carryover, and there is every reason to expect another crop of record proportions.

To both officials in USDA and those in the trade it makes a good deal of sense to beat the drums for additional exports during the last half of the present marketing season.

For this reason it's expected that a string of additional export authorizations will be announced after the 480 legislation is passed and another $1 billion in special export funds are available.

Deal With Poland

Spain is in the market for still more oil. Fats and oils are on the Polish shopping list when the deal for surplus crops with the U. S. goes through.

The Poles are now believed to be waiting until P. L. 480 legislation has passed Congress. The Polish program is now said to be up to around $105 million total — $30 million in easy loans and 75 million under the 480 program. There is not enough money in 480 to finance this now.

Actual amount of fats and oils wanted by Poland was still classified information at end of April. However, USDA officials could say that the volume is larger than expected. A good deal of lard is wanted, and some soybeans, say officials.

The 480 bill is through the Senate with section 304 removed. This is the section prohibiting deals with communist dominated countries. House leaders say they couldn't get the bill through there without some limit on sales to communist countries. Their plan is to pass the bill with no changes, and compromise in conference with the Senate.

House leaders are willing to specify a few outright communist countries — Russia, China, North Korea, and Viet Nam—as ineligible for 480 funds.

There was a record supply of 216,907,000 bushels of soybeans on hand April 1. Crush through March totalled 165.5 million bushels. It's estimated another 160 million will be crushed during the last half of the marketing year. Some trade estimates put this 5 to 10 million bushels smaller. Export of soybeans this marketing year is now calculated at 80 million bushels.

Of some 55 million bushels under loan and purchase agreement at the close out of loans at the end of January, something like 30 million bushels of beans are expected to be taken over by CCC at mid-year.

Beans taken over by CCC, it is understood, are to be exported as beans to the extent possible.

Carryover at the beginning of the

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AMBAYS

MEMBER NATIONAL FATS & OILS BROKERS' ASSOCIATION

1957 marketing season next October is estimated at around 25 million bushels—not over 30 million.

Report of Commission

A broad program of economic and marketing research to expand domestic uses of fats and oils is one of a number of recommendations by the President's Commission on Increased Industrial Use of Agricultural Products.

The Commission is headed by J. Leroy Welch of Omaha. It has just issued an interim report which is noticeable for its absence of extravagant claims that sometimes characterize documents of this kind.

It outlines a longtime program for many crops, calls for more funds for research on new uses, asks for the introduction of new crops through research development, and asks that funds be obtained by using 15% of import duties.

The report foresees surpluses in this country including oilseeds, for some time to come. It says low cost production will be needed to move excess farm output into industrial uses. It estimates that while industry spends some $3 billion a year on research, agriculture spends only $375 million.

The report says "The United States in recent years has become a surplus producer of fats and oils as a result of an upward trend in production, a pronounced increase in competition from synthetic raw materials in industrial uses, and a static level of consumption of food fats per person.

"Great dependence is now placed on foreign outlets, which are comparatively low-price, variable, and uncertain markets. Broadened domestic outlets are needed to strengthen the position of producers."

Studies are needed, says the report, to do the following:

Determine household and industrial consumer attitudes and opinions about existing or new fats and oils products.

Determine the means by which household and industrial consumer demand for fats and oils products may be increased by improved merchandising practices and promotional programs.

Provide basic marketing information about the size and structure of fats and oils markets.

Determine the competitive position of fats and oils in existing uses, and the competition that must be met to regain certain lost markets, maintain present markets and develop new ones.

(See also the report by Willard Lighter beginning page 22.)

- MARKET STREET -

We invite the readers of THE SOYBEAN DIGEST to use MARKET STREET for their classified advertising. If you have processing machinery, laboratory equipment, soybean seed, or other items of interest to the industry, advertise them here.

Rate 10c per word per issue. Minimum insertion $2.00.

SEED—LEE SOYBEANS. MISSISsippi registered and certified handrogued Lee soybeans, very low mechanical injury if any. Moisture around 12%, purity 98 plus. Germination, run in March and April, 85 plus. These quality seed are the best that can be produced, dried, fumigated, processed and treated. Bagged in 1 or 2 bu. bags. Bard Selden, Hollywood, Miss.

FOR SALE—60 CU. FT. S. HOWES horizontal mixer, rebuilt, like new. Kelly Duplex molasses blender, used very little. 15 ft. Prater drag feeder, rebuilt. McLaughlin, Ward & Co., 409 S. 23rd St., Jackson, Mich.

TWO NORDYKE-MARMON 120 BU. rotary dryers, excellent condition. Loeb Equipment Supply Co., 816 W. Superior St., Chicago 22, Ill.

ONE SPROUT-WALDRON TYPE 49 Simplex pellet mill, complete with T.E.F.C. motor and explosion proof starter. Unit in excellent condition with several new dies. Write or call General Equipment & Manufacturing Co., Fort Dodge, Iowa.

NEW AND USED PORTABLE FEED mills. H. L. Myers, Route 3, Alliance, Ohio. Phone 7044.

FISCHBEIN BAG CLOSERS AND repair parts, in stock for immediate shipment. McLaughlin, Ward & Co., 409 S. 23rd St., Jackson, Mich.

LAUHOFF FLAKING ROLLS—ALso single, double, two and three pair high roller mills. Ben Selby, 925 Montrose Ave., Chicago, Ill.

FOR SALE — 72 - INCH FRENCH cookers, 10 x 42 three high cracking rolls, Anderson coolers, driers and Expellers, cake breakers, meal grinders, boilers, sewing machines. Ray L. Jones, 2222 Oakview Drive, Jefferson City, Mo.

BELTING SALE—FOR CONVEYOR and elevator legs. About all widths and plies in stock. Lengths up to 200 feet. All belt guaranteed. Advise size belt required and we will quote prices and submit samples. Prices far below market price. Corns Conveyor Belt Co., Griffith, Ind.

WANTED: FLAKING AND CRACKing rolls, meal coolers and driers and rollermills. Soybean Digest, Box 319-J, Hudson, Iowa.

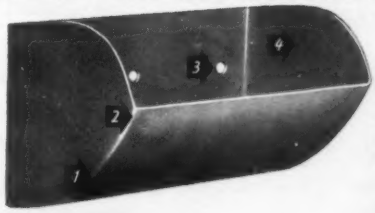
FOR SALE—NEW OR USED 80600E or 80600H sewing machine heads, Whizzer conveyors, bagging scales and bins. Write Winborns, Williamsburg, Iowa.

FOR SALE — TWO FRENCH EXpeller units, one hp Cyclothren automatic gas steam generator and other equipment. Plant in operation. Soybean Digest, Box 319-C, Hudson, Iowa.

STEEL GRAIN BINS—18 FT. x 16 ft. surplus government type steel bins, new, approximately 3,500 bushels capacity, available for your surplus storage problems. For particulars write: Midwest Steel Products Co., 121B Railway Exchange Bldg., Kansas City 6, Mo.

STEINLITE TESTERS, FACTORY rebuilt—reasonable. McLaughlin, Ward & Co., 409 S. 23rd St., Jackson, Mich.

First Choice Wherever Grain is Handled



Your jobber has them, or write B. I. Weller Company, 327 South LaSalle Street, Chicago 4, Illinois.

(1) The logarithmic curve design loads easier . . . dumps cleaner . . . permits high speeds.
(2) Scientifically formed lip aids in greater cup capacity.
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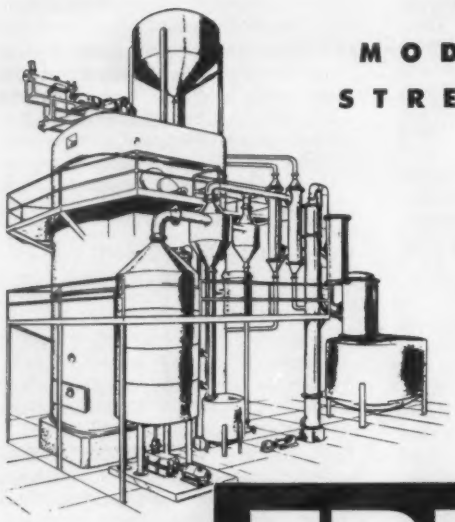

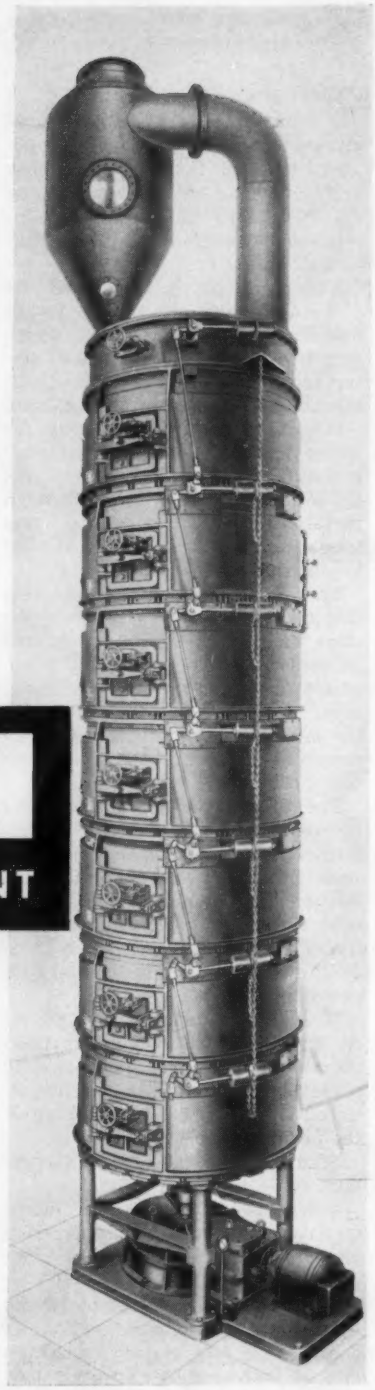

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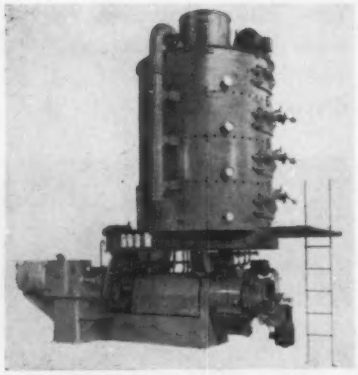
French, the world's largest manufacturer of vegetable oil processing equipment, can show you how to cut operating costs . . . increase capacity . . . and improve product quality. Our engineers have made complete studies of many operating plants of all makes—and have shown management how to cut costs and increase capacity . . . all at very low cost. Ask us to make recommendations for boosting the efficiency and profits of your plant. Write to FOMMCO, Extraction Division, Piqua, Ohio.



French Continuous Mechanical Screw Press. Residual oils as low as 2.5%.

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PIQUA, OHIO—U. S. A.

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- COOKER-DRYERS
- SOLVENT EXTRACTION PLANTS
- FLAKING AND CRUSHING ROLLS

LATE REPORTS

PROCESSING OPERATIONS. Reported by Bureau of the Census for February and March.

Primary products except crude oil at crude oil mill locations: Production, shipments and transfers, and stocks, March 1957-February 1957 (tons of 2,000 pounds)

	Production		Shipments and transfers		Stocks end of month	
	March 1957	Feb. 1957	March 1957	Feb. 1957	Mar. 31, 1957	Feb. 28, 1957
Soybean:						
Cake and meal	688,482	630,006	640,799	599,417	136,571	88,888
Flour	11,546	8,399	8,432	9,355	4,824	1,710
Lecithin	1,456	1,451	(NA)	(NA)	1,562	1,472

NA—Not available.

Soybeans: Net receipts, crushings, and stocks at oil mills, by states, March 1957-February 1957 (tons of 2,000 pounds)

	Net receipts at mills		Crushed or used		Stocks at mills	
	Mar. 1957	Feb. 1957	Mar. 1957	Feb. 1957	Mar. 31, 1957	Feb. 28, 1957
U. S.	504,285	523,119	867,263	798,670	1,326,974	1,689,952
Illinois	174,079	160,532	311,665	284,225	458,462	596,048
Indiana	46,179	57,570	80,845	75,559	100,948	135,614
Iowa	100,646	93,918	136,856	127,707	110,331	146,541
Kansas	(1)	(1)	(1)	(1)	(1)	(1)
Kentucky	9,910	13,379	(1)	(1)	(1)	(1)
Minnesota	62,155	62,020	60,496	66,720	27,362	25,703
Missouri	6,932	14,333	29,043	24,678	62,983	85,094
Nebraska	(1)	(1)	(1)	(1)	(1)	(1)
North Carolina	309	1,497	4,463	6,326	29,870	34,024
Ohio	40,639	66,340	90,427	79,403	153,924	203,712
Texas	(1)	(1)	(1)	(1)	(1)	(1)
All other	63,436	53,521	153,468	134,052	383,094	463,216

[1] Included in "All other" to avoid disclosure of figures for individual companies.

Soybean products: Production and stocks at oil mill locations, by states, March 1957-February 1957

	Crude oil (thousands of pounds)				Cake and meal (tons)			
	Production		Stocks		Production		Stocks	
	Mar. 1957	Feb. 1957	Mar. 31, 1957	Feb. 28, 1957	Mar. 1957	Feb. 1957	Mar. 31, 1957	Feb. 28, 1957
U. S.	313,006	287,218	71,999	49,066	688,482	630,006	136,571	88,888
Illinois	116,138	105,893	16,102	15,342	240,639	217,041	43,108	25,313
Indiana	29,856	27,803	5,437	4,000	65,795	61,097	18,458	(1)
Iowa	48,717	45,624	12,862	7,468	112,706	105,436	20,285	13,196
Kansas	(1)	(1)	1,146	1,162	(1)	(1)	(1)	(1)
Kentucky	(1)	(1)	(1)	(1)	(1)	(1)	(1)	972
Minnesota	20,914	22,724	13,199	4,577	47,421	53,301	9,203	12,254
Missouri	10,503	8,846	1,379	1,067	23,984	20,174	3,275	3,766
Nebraska	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)
N. Carolina	1,353	1,790	722	557	3,438	4,856	1,147	1,565
Ohio	31,413	27,745	5,319	3,557	73,027	63,853	6,090	4,210
Texas	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)
All other	54,112	46,793	15,833	11,336	121,472	104,248	35,005	27,612

[1] Included in "All other" to avoid disclosure of figures for individual companies.

STOCKS. Soybean stocks in all storage positions on Apr. 1 are estimated at nearly 217 million bushels, according to Agricultural Marketing Service. These were the highest Apr. 1 stocks of record, exceeding last year, the previous high, by about 40 million bushels. The increase was accounted for by the record farm and interior mill, elevator and warehouse holdings. Stocks at processing plants and terminals were well below last year.

Stocks of soybeans Apr. 1, 1957 with comparisons (1,000 bu.)

	Apr. 1 av. 1946-55	Apr. 1 1956	Jan. 1 1957	Apr. 1 1957
On farms[1]	50,730	60,334	169,318	116,323
Terminals[2]	9,381	22,193	16,550	9,716
Commodity Credit Corp.[3]	88	0	0	0
Processing plants[4]	42,554	67,366	70,354	44,232
Int. mills, elev. & whses.[1 5]	21,221	26,979	73,403	46,636
Total	123,972	176,872	329,625	216,907

[1] Estimates of the crop reporting board. [2] Commercial stocks reported by grain division, AMS, at 45 terminal cities. [3] Owned by CCC and stored in bins or other storages owned or controlled by CCC, also CCC-owned grain in transit; other CCC-owned grain is included in the estimates by positions. [4] Firms reporting to the Bureau of the Census, on millings and stocks of flour and crushings and stocks of soybeans. [5] All off-farm storages not otherwise designated.

	Off-farm total[1] Apr. 1		Total[2] all positions Apr. 1	
	1956	1957	1956	1957
Ohio	10,757	9,145	16,018	17,575
Ind.	7,404	6,165	15,295	18,676
Ill.	38,487	33,651	52,423	66,788
Minn.	11,995	11,781	21,221	31,221
Iowa	16,694	14,106	26,190	33,957
Mo.	6,115	4,786	10,105	13,392
Nebr.	274	.....	558	.....
Kans.	1,128	.....	1,630	.....
N. C.	116	1,374	1,180	2,447
Others[6]	23,568	20,176	32,252	32,851
U. S.	116,538	100,584	176,872	216,907

[6] Other states and unallocated, to avoid disclosing individual operations. [1] Includes stocks at interior mills, elevators and warehouses, commercial stocks reported by grain division, AMS, at terminals, and those owned by Commodity Credit Corp. which are in transit, in bins and other storages under CCC control. [2] Off-farm total plus farm stocks.

SUPPLY AND DISTRIBUTION of the 1953-56 soybean crops, reported by Agricultural Marketing Service (1,000 bu.)

	1953-54	1954-55	1955-56	1956-57
Carryover, Oct. 1	10,134	1,345	9,949	3,731
Production	269,169	341,075	373,522	455,869
Total supply[1]	279,303	342,420	383,471	459,600
Farm use including seed for season	25,160	24,000	30,000	30,000
Quantity remaining for processing, export or carryover	254,143	318,420	353,471	429,600
Disappearance, October through Mar. 31:				
Crushed for oil or processed[2]	121,229	125,899	148,989	165,457
Exported	31,482	39,826	46,047	[3] 51,744
Total	152,711	165,725	195,036	217,201
Balance on Apr. 1 for processing, export or carryover	101,432	152,695	158,435	212,399

[1] Imports negligible. [2] No allowance is made for new crop crushings prior to Oct. 1. [3] Data for March estimated.

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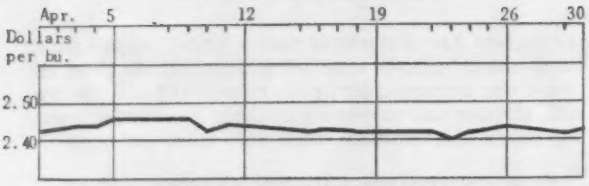
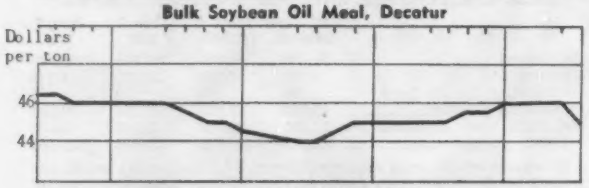
DAILY MARKET PRICES

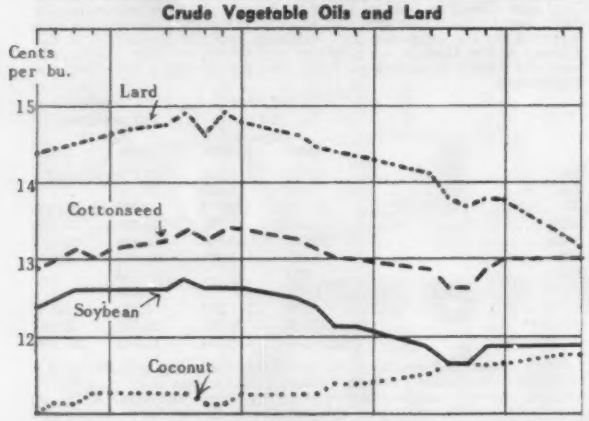
No. 1 Cash Soybeans, Chicago



Bulk Soybean Oil Meal, Decatur



Crude Vegetable Oils and Lard



April Markets

CASH SOYBEANS showed little net change in price level during April as they rested near the support level, and meal and oil prices were both off. Oil reached the lowest level since early last October, and meal equalled the lowest point in a 10-year period.

Meal staged some recovery in late April.

Processors were faced with the twin problem of weak meal and oil markets with a resulting poor conversion ratio.

Country marketings continued light. Withdrawals from price support were very small and there was the prospect of as much as 50 million bushels being taken over by Commodity Credit Corp.

A bearish factor was CCC's announced disposal policy on loan-defaulted beans, which nurtured the belief that good supplies of soybeans will soon be available at a minimum selling price.

Probably the leading bearish factor was delayed action by Congress on a program of fats and oils exports including renewal of P. L. 480 and aid to Poland.

Bullish factors included:

1—The USDA stock reports which indicated smaller stocks of soybeans than expected, leading to the belief that the 1956 crop may have been overestimated, and that the carryover of soybeans into the next crop year may be much smaller than had been expected.

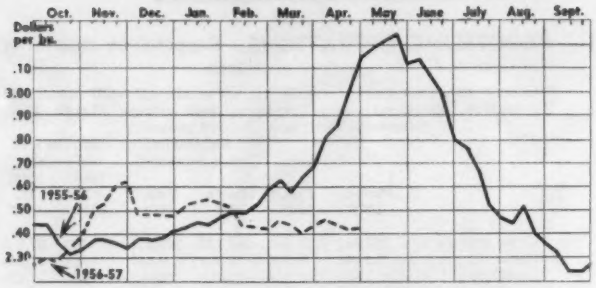
2—The opening of Great Lake transportation with soybean shipments from Chicago to Canada.

Trade News Service, New York, commented on the paradox of a declining price structure in the face of record breaking disappearance, decreasing stocks and an unusually low prospective carryover of edible oils.

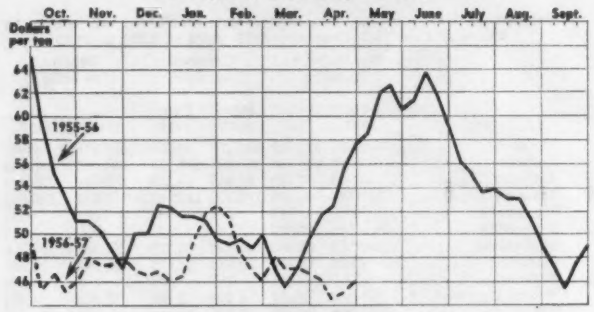
BYPRODUCTS. The price of soybean fatty acids remained at 15¼¢ per pound during April. Acid soybean soap stock delivered Midwest remained at 6½¢, and raw soybean soap stock advanced from 2½¢ to 2¾¢ per pound.

TRENDS AT A GLANCE (Weekly Close)

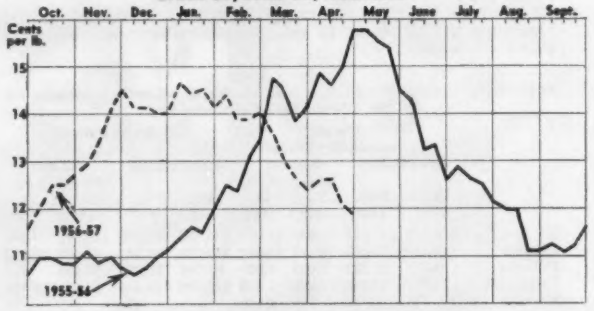
No. 1 Cash Soybeans, Chicago



Bulk Soybean Oil Meal, Decatur



Crude Soybean Oil, Tankcars



POSITION OF 1956 SOYBEAN CROP

	Mar. 15, 1957	Mar. 15, 1956
Total soybeans placed under government support..	65,723,000 bu.	30,064,000 bu.
Total soybeans withdrawn from support	10,730,000 bu.	
Total remaining under support	54,993,000 bu.	
	1956-57	**1955-56**
Soybeans crushed Oct. 1-Mar. 31.....	165,457,000 bu.	148,989,000 bu.
Exported Oct. 1-Mar. 31	51,744,000 bu.	46,047,000 bu.
Balance on hand for processing or export Apr. 1	212,399,000 bu.	158,435,000 bu.
Total soybeans inspected for overseas export including shipped to Canada Oct. 1-Apr. 19	58,963,231 bu.	48,151,903 bu.

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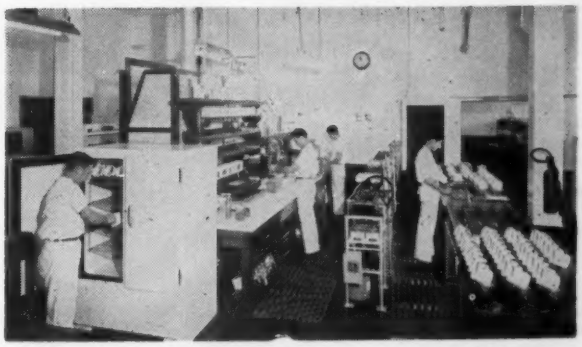

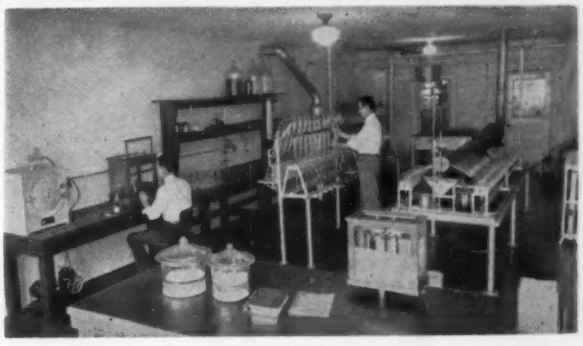

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NEW PRODUCTS and SERVICES

STORAGE TANKS. Two new models of corrugated galvanized steel tanks for the storage and automatic movement of feed, grain and other materials moved in bulk have been announced by Butler Manufacturing Co.

One of the new additions is a 6-foot diameter side-draw-off hopper model, designed to handle hard-to-flow bulk feeds with ease. The design makes it possible to handle newer types of high fat content feeds that tend to "bridge" and hang up in conventional bulk equipment. There is no danger of feed ingredients soaking into the walls and molding to contaminate the next load.

This tank is available in four sizes, from 3.8 to 8.3 tons, and is for installation on the farm or at feed dealers.

The second new model is a 9-foot-diameter center-draw-off hopper tank that provides bulk storage up to 25 tons for dealers and mills at one-half the present welded tank storage costs. All normal flowing feeds can now get the maximum protection quality steel construction affords for less than $25 per ton. Available in five sizes, from 11 to 24.5 tons.

For further information write Soybean Digest 5d, Hudson, Iowa.

V-BELTS. Simple precautions to prolong the life of V-belts, increase drive efficiency and thereby assure full continuous production are contained in a new 12-page bulletin released by Allis-Chalmers Manufacturing Co.

The bulletin describes various types of V-belts and tells how to select and match them. It lists seven steps for the correct installation of belts and offers as many hints for making them last longer.

Portrayed are eight most common causes of V-belt destruction. These include snub break, slip burn, base cracking, abrasion, oil deterioration, rupture, ply separation, and worn sides.

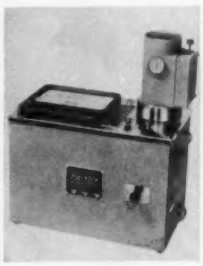
Information in the bulletin is applicable to all types of V-belts manufactured today.

For a copy of "Longer Belt Life for Your V-Belt Drives, 20X6234C," write Soybean Digest 5c, Hudson, Iowa.

MOISTURE TESTER. According to Seedburo Equipment Co., the new Steinlite Model 500 RG has been designed especially for the grain trade and has new convenience features that greatly aid the operator and guarantee fast, accurate moisture tests.

These features include:

1—New round funnel that handles larger (250 gram) sample which is more representative and minimizes chance of error.



2—Easier to read, built-in, eye-level thermometer.

3—Large 9-inch meter, with one scale for all moisture ranges. This meter is read from a level position for absolute accuracy.

4—One button control for all moistures.

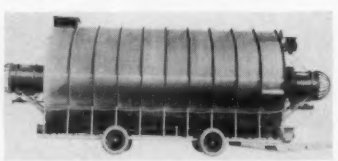
5—Self-returning test cell slide that snaps back automatically after tested sample drops into grain drawer.

The new tester has charts available now to test soybeans and grains.

For full information write Soybean Digest 5a, Hudson, Iowa.

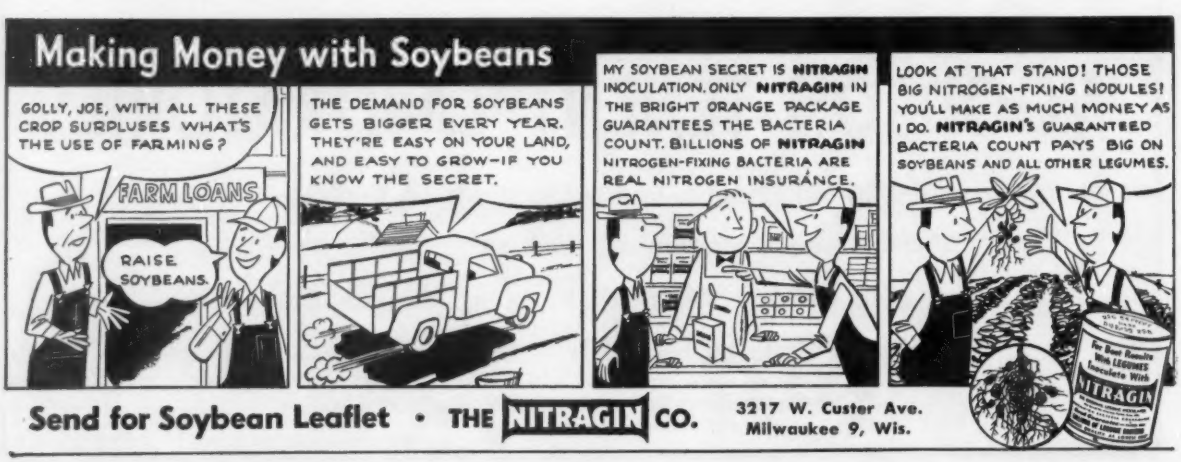
PORTABLE GRAIN DRYER. American Farm Equipment Sales Co. is introducing this season what it calls the first completely automatic portable farm crop and grain drying machine ever to be sold commercially.

One button controls the whole procedure. The button starts the loading process from grain bin through conveyor to dryer; then at a given point the loading conveyor stops and the dryer begins, automatically reloading as shrinkage occurs. This continues until the grain is dried to a pre-determined point.



The drying operation then stops and the unloading conveyor takes over. Thus it continues hour after hour . . . load, dry, unload . . . again and again until the supply of wet grain is exhausted. Then the machine automatically shuts itself off, waiting until a new load is ready and the operator pushes the button once more.

For more information about this unit, write the Soybean Digest 5b, Hudson, Iowa.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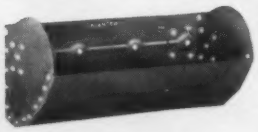

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IN THE MARKETS

EXPORTS. Preliminary data on U. S. exports of soybeans and soybean oil for February 1957, with comparable data for February 1956 and cumulative totals for the marketing years 1955-56 and 1956-57, reported by Foreign Agricultural Service, U. S. Department of Agriculture.

	Unit	February 1956	February 1957	October-February 1955-56	October-February 1956-57
Soybeans	bu.	2,642,951	4,204,284	44,160,272	48,243,768
Soybean oil:					
Crude	lb.	5,298,271	46,609,156	11,230,192	166,786,192
Refined but not further processed	lb.	6,998,029	2,084,260	32,909,420	24,728,399
Refined, deodorized and hydrogenated	lb.	32,350,671	39,236,776	145,781,508	208,939,241
Total beans and oil, bean equivalent basis	bu.	6,924,180	12,438,296	62,433,730	85,991,845

Cottonseed and soybean oils, total exports and the quantity shipped under Title I, P. L. 480 programs to date

Period[1]	Total Mil. lb.	Under Title I Quantity Mil. lb.	Under Title I Percent of total Percent
Oct. 1954-Sept. 1955	760	117	15
Oct. 1955-Sept. 1956	1,173	567	48
Oct. 1955-Feb. 1956	431	170	39
Oct. 1956-Feb. 1957	[2] 615	247	40
Total	2,548	931	37

[1] Exports under Title I began in May 1955. [2] February is preliminary.

Exports of fats and oils under Title I, P. L. 480 in October 1956 - February 1957 (mil. lb.)

Country	Edible oils Cottonseed	Soybean	Total	Lard	Tallow	Linseed oil
Chile		[1] 38.2	38.2			
China, Rep of					10.1	
Ecuador	.9		.9			
Greece		35.7	35.7			
Israel					1.1	
Italy		56.5	56.5			
Pakistan						[2]0.3
Paraguay	2.0		2.0	1.5		
Spain		86.6	86.6		6.6	2.7
Turkey	22.8		22.8		2.7	
Yugoslavia	.2	4.0	4.2	8.8	6.0	
Total	25.9	221.0	246.9	10.3	26.5	3.0

[1] Erroneously reported as cottonseed oil in the Feb. 1 circular. [2] .6 million since July 1, 1956, the beginning of the present marketing year for linseed oil.

Soybeans: Inspections for overseas export by coastal areas and country of destination, March 1957 (1,000 bu.)

Country	
Atlantic	
Holland	393
Belgium	93
West Germany	243
United Kingdom	299
Norway	184
Denmark	154
Other	2
Subtotal	1,368
Gulf	
Holland	474
Belgium	164
West Germany	388
Denmark	330
Japan	1,098
Other	4
Subtotal	2,458
Grand total	3,826
Total January-March 1957	17,888
Total January-March 1956	12,346

Note: Data are based on weekly reports of inspections by licensed grain inspectors for overseas export and do not include rail or truck movement to Canada or Mexico. In some cases the ultimate destination of the grain exported is not shown on the inspection reports, therefore, the quantity of each country may vary from official census data which are based on custom declarations.

Soybeans: Inspections for overseas export by ports and country of destination Mar. 18-Apr. 12, reported by Agricultural Marketing Service (bushels)

	Philadelphia	Baltimore	Norfolk	New Orleans	Mobile	Port Allen, La.	Total
Hong Kong	667						667
United Kingdom		74,667	56,000				130,667
Belgium		56,000		56,000	76,533		188,533
Holland		165,752	197,867	823,819			1,187,438
W. Germany			280,000	130,853	76,533		487,386
Philippines				4,315			4,315
Syria	889						889
Norway		34,333					34,333
Japan				1,042,042		1,459,738	2,501,780
Formosa						349,081	349,081
Israel				52,267			52,267
Sweden		27,500					27,500
Total	1,556	358,252	533,867	2,109,296	153,066	1,808,819	5,140,656

Included in the total are 175,800 bushels inspected at Chicago for shipment to Canada.

Soybean Dust Problems Solved by Sturtevant Air Separator

RIGHT: Spencer Kellogg & Sons employee making classification adjustment on Sturtevant Air Separator in operation at Bellevue, Ohio, soybean meal plant. Separator minimizes air-borne dust losses while removing hulls and classifying end product.

LEFT: Two lead-off chutes at bottom of Sturtevant Air Separator in Spencer Kellogg & Sons plant. One chute in the closed circuit system sends to packaging all uniform size, dust-free meal while the other returns all undersize fines for pelletizing.

Closed Circuit Air Separation Cuts Losses, Keeps Plant Cleaner, Improves End Product

Dust — finer than 80 mesh — was accounting for 4 to 5 percent of the soybean meal production at the Spencer Kellogg & Sons plant in Bellevue, Ohio. Much of this dust was disseminated into the air during processing, becoming a total loss. And such free dust made working conditions unpleasant, plant and storage sheds untidy in appearance. Also, the proportion of dust retained in the end product was an annoyance to farmers and ranchers.

All of these problems have been solved by a Sturtevant Air Separator operating in closed circuit with a pelletizing machine. The processed soybean meal goes through the Air Separator at the rate of about 85 tph. Particles representing dust and hulls go out the fines chute to the pelletizer. The pellets are then ground and re-circulated through the Air Separator at rates to 10 tph, bringing the machine's total capacity to 95 tph.

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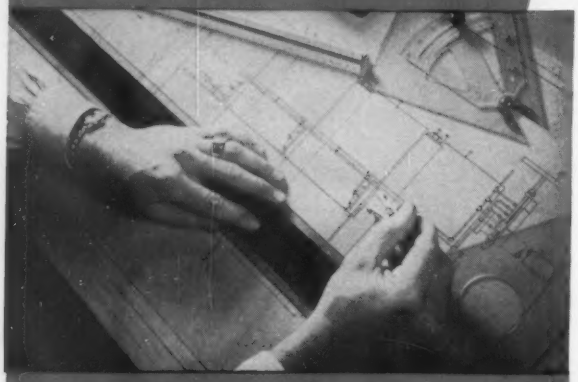

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FACTORY USE VEGETABLE OILS for January and February. Reported by Bureau of the Census (1,000 lbs.)

Primary materials: Factory production and consumption and factory and warehouse stocks, February 1957—January 1957

	Factory production		Factory consumption		Factory and warehouse stocks	
	Feb. 1957	Jan. 1957	Feb. 1957	Jan. 1957	Feb. 28, 1957	Jan. 31, 1957
Cottonseed, crude	170,419	207,691	141,750	175,185	168,091	170,536
Cottonseed, refined	132,848	163,853	113,600	131,666	288,422	266,693
Peanut, crude	14,398	12,998	8,064	5,101	7,973	7,416
Peanut, refined	7,715	4,767	3,690	3,492	6,921	4,812
Corn, crude	21,441	22,943	22,066	24,869	11,376	10,446
Corn, refined	20,568	23,200	19,171	24,027	8,897	8,052
Soybean, crude	287,218	305,156	222,805	254,453	129,964	134,093
Soybean, refined	209,184	240,523	208,571	222,557	99,970	103,973
Vegetable foots, 100% basis	17,805	20,587	12,034	13,142	46,357	44,148
Hydrogenated vegetable oils edible:						
Cottonseed	40,389	46,176	37,144	41,502	21,882	22,535
Soybean	89,410	95,910	78,853	88,561	38,971	36,844
Other	6,108	6,829	4,345	4,988	2,814	2,873

Factory consumption of vegetable fats and oils, by uses, during February 1957

	Edible products			Inedible products			
	Shortening	Margarine	Other edibles	Soap	Paint and varnish	Lubricants and similar oils[1]	Other inedibles[2]
Cottonseed, refined	11,889	3,996	2,035	.....	3	.....	252
Soybean, crude	.....	.....	.....	50	386	.....	2,522
Soybean, refined	31,260	5,498	3,019	.....	6,220	29	7,212
Foots, vegetable, raw and acidulated (100% basis)	.....	.....	.....	2,301	178	499	1,612
Hydrogenated vegetable oils, edible:							
Cottonseed	9,939	25,565	.....	.....	.....	.....	.....
Soybean	21,420	56,512	905	.....	.....	.....	.....
Other	1,583	1,489	.....	.....	.....	.....	.....

[1] Includes quantities consumed in lubricants, greases, cutting oils, dielectric oils, core oils, brake fluids, and metal working. [2] Quantities consumed in linoleum and animal feeds are included in the above totals. Data for fats and oils consumed in chemicals and linoleum and oilcloth, which were previously shown separately, are now included in "Other inedible" while quantities consumed in core oils, cutting oils, brake fluids, dielectric oils, and metal working, formerly included in this total, are now classified in "Lubricants and similar oils." [3]Not shown to avoid disclosure of figures for individual companies.

Consumption of fats and oils in fat splitting

	1957			1956	
Soapstocks	Feb.	Jan.	Jan.-Feb. cumulative	Jan.	Jan.-Feb. cumulative
Vegetable foots	6,985	7,467	14,452	10,693	19,197

Source: U.S. Census Bureau.

SHORTENING. Shortening shipments reported by the Institute of Shortening and Edible Oils, Inc., in pounds.

Mar. 23	23,160,713
Mar. 30	24,534,437
Apr. 6	22,334,940
Apr. 13	23,410,831
Apr. 20	24,351,254

INSPECTIONS. Soybeans inspected by grades and percent, reported by Agricultural Marketing Service.[1]

Grade	Oct.-March 1955-56		Oct.-March 1956-57		March 1956		February 1957		March 1957[2]	
	1,000 bu.	Pct.	1,000 bu.	Pct.	1,000 bu.	Pct.	1,000 bu.	Pct.	1,000 bu.	Pct.
No. 1	44,537	21	33,288	16	5,678	29	2,341	16	2,462	16
No. 2	104,277	49	82,176	40	9,856	50	6,058	42	6,902	43
No. 3	42,367	20	47,734	24	2,714	14	3,425	23	3,054	19
No. 4	15,547	8	28,780	14	1,075	5	1,602	11	2,220	14
Sample	4,705	2	13,052	6	376	2	1,125	8	1,314	8
Total	211,433	100	205,030	100	19,699	100	14,551	100	15,952	100

[1] Carlot receipts have been converted to bushels on the basis that 1 carlot equals 1,750 bushels. [2] Of the March 1957 receipts, 350 bushels were black, 5,712 mixed, and the remainder yellow soybeans. Inspections of soybeans in March included 4,096,000 bushels as cargo lots, 1,861,250 bushels as truck receipts, and the balance as carlot receipts. Based on reports of inspections by licensed grain inspectors at all markets.

STOCKS ON FARMS. Record soybean stocks on farms Apr. 1 totaled 116 million bushels, reported Agricultural Marketing Service. This is nearly double the quantity on farms a year earlier and exceeds by 3 million the previous record stocks of Apr. 1, 1955.

Disappearance of soybeans from farms during the January-March quarter totaled 53 million bushels. Last year for the same period, disappearance was unusually heavy—considering available supplies—amounting to 56 million bushels. Although movement from farms for the past quarter was nearly as large as a year earlier, it was relatively light considering the large stocks on hand Jan. 1. Prices of soybeans have not made their usual seasonal advance, due to large supplies, and farmers are holding considerable quantities, with the amount under loan the highest of record. Relatively few soybeans under loan have been redeemed since farm prices have averaged near the loan rate.

Farm stocks as usual are concentrated largely in the heavy producing North Central states with 107 million bushels in that area alone. Stocks on farms appear ample in all states to meet the usual seeding requirements.

Soybean stocks on farms on Apr. 1 (1,000 bu.)

State	Average 1946-55	1956	1957	State	Average 1946-55	1956	1957
N.Y.	25	24	28	Md.	269	248	310
N.J.	97	137	238	Va.	415	603	874
Pa.	125	97	116	N.C.	816	1,064	1,073
Ohio	5,134	5,261	8,430	S.C.	207	567	678
Ind.	6,938	7,891	12,511	Ga.	76	137	197
Ill.	14,739	13,936	33,737	Fla.	[1] 7	63	67
Mich.	546	941	1,470	Ky.	328	507	748
Wis.	166	312	567	Tenn.	313	405	554
Minn.	4,833	9,226	19,440	Ala.	68	130	139
Iowa	9,833	9,496	19,851	Miss.	528	1,427	1,171
Mo.	3,124	3,990	8,606	Ark.	639	1,533	2,309
N. Dak.	86	423	713	La.	50	136	298
S. Dak.	336	782	953	Okla.	39	32	14
Nebr.	231	284	332	Texas	—	2	32
Kans.	531	502	453	U. S.	50,730	60,334	116,323
Del.	230	178	414				

[1] Short-time average.

STOCKS. Agricultural Marketing Service's commercial grain stocks reports for close of business on Friday or Saturday preceding date of report (1,000 bu.)

	Mar. 26	Apr. 2	Apr. 9	Apr. 16	Apr. 23
U. S. soybeans in store and afloat at domestic markets					
Atlantic Coast	1,416	1,205	1,135	1,299	1,146
Gulf Coast	1,336	1,170	940	947	883
Northwestern and Upper Lake	1,350	1,381	1,312	1,076	755
Lower Lake	4,640	4,336	4,247	4,016	3,424
East Central	1,209	1,198	1,259	1,201	1,307
West Central					
Southwestern & Western	501	426	348	265	254
Total current week	10,452	9,716	9,241	8,804	7,769
Total year ago	22,182	22,526	21,526	21,027	19,632
U. S. soybeans in store and afloat at Canadian markets					
Total current week	227	197	153	108	63
Total year ago	429	410	381	82	40
Total North American commercial soybean stocks					
Current week	10,679	9,913	9,394	8,912	7,832
Year ago	22,611	22,936	21,907	21,109	19,672

Primary receipts (1,000 bu.) of soybeans at important interior points for week ending:

	Mar. 22	Mar. 29	Apr. 5	Apr. 12	Apr. 18
Chicago	116	103	132	438	353
Indianapolis	121	152	234	133	75
Kansas City	8	13	32	25	42
Minneapolis	63	44	131	152	45
Omaha	27	15	30	87	65
Peoria	29	53	34	41	22
Sioux City	23	13	26	57	32
St. Joseph	18	....	2	....	....
St. Louis	45	23	2	....	4
Toledo	38	20	29	34	13
Totals	488	436	654	967	651
Last year	1,276	831	1,318	1,023	1,018
Total Chicago soybean stocks	3,737	3,220	2,877	2,951	2,450

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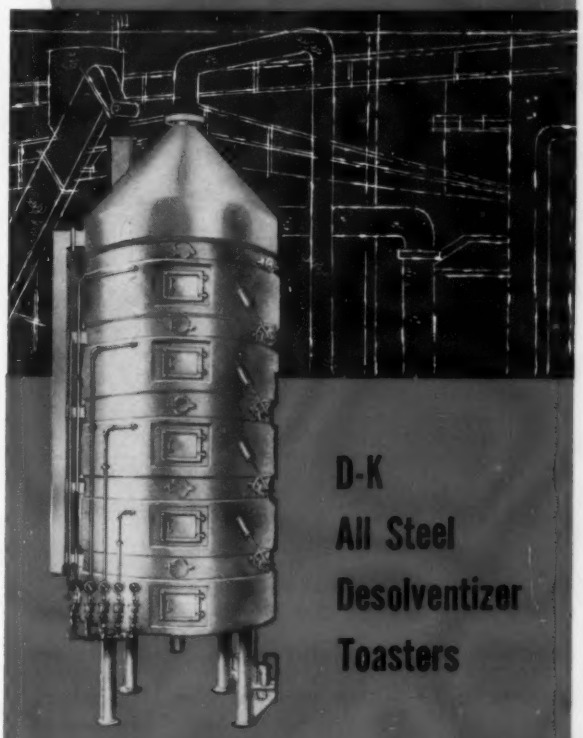

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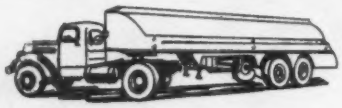
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CANADIAN CRUSHINGS. Production in 1956 of soybean oil meal, the major single component of Canadian high protein feeds, amounted to 306,084 tons, surpassing the 1955 and 1954 production by 16% and 35% respectively, reports the Dominion Bureau of Statistics. Supplementing the 1956 production were imports of 215,700 tons, and although exports, at 246,959 tons, were nearly two-thirds greater than those in 1955, supplies available for domestic requirements in 1956 (including imports) amounted to 274,825 tons, exceeding by considerable margins both the 1955 and 1954 totals of 219,900 tons and 203,400 tons, respectively.

Preliminary estimate of high protein feed supplies available in Canada in 1956 with comparable figures for 1954 and 1955 (tons)

	1954 (Revised)	1955 (Subject to revision)	1956 (Preliminary)
Linseed oil meal	53,300	36,000	38,100
Soybean oil meal	203,400	219,900	274,800
Other oil meals and gluten feed[1]	51,400	49,100	54,000
Malt sprouts	9,600	9,000	9,000
Brewers' and distillers' dried grains	67,000	63,000	65,000
Total vegetable protein	384,700	377,000	440,900
Fishmeal	33,000	23,800	31,000
Packing-house byproducts[2]	90,300	103,100	105,000
Skim milk, buttermilk and whey powders	8,500	9,800	9,800
Total animal protein	131,800	136,700	145,800
Total protein supplies	516,500	513,700	586,700

[1] Other oil meals include sunflower, rapeseed, mustard seed, copra and safflower. Data on these individual items may not be published as each of these commodities is produced by less than three firms. [2] Meat meal, meat scrap, tankage, blood meal, etc.

Soybean crushings in Canada, 1945-56, reported by Dominion Bureau of Statistics, Ottawa

	Quantity crushed bu.	Oil produced lb.	Oil meal produced tons
1945	973,178	8,566,975	23,203
1946	1,846,469	18,201,473	42,712
1947	2,701,702	27,052,473	62,975
1948	2,537,433	26,863,917	58,383
1949	4,508,138	45,963,471	105,314
1950	5,647,815	56,931,185	134,532
1951	7,483,382	73,513,281	177,982
1952	7,915,207	80,175,836	189,741
1953	8,627,773	90,570,318	206,581
1954	9,438,795	99,788,877	226,046
1955	11,174,452	115,517,536	264,633
1956[1]	12,883,988	135,977,596	306,084

[1]Preliminary.

PRICE SUPPORT. 1956-crop soybeans put under price support and loans withdrawn from support as of Mar. 15. Reported by Agricultural Marketing Service, USDA (1,000 bu.)

Quantity put under loan			Quantity of loans withdrawn from support	Purchase agreements	Total put under support 1956-57[1]	Total put under support 1955-56
Farm stored	Warehouse stored	Total				
29,082	30,409	59,491	10,730	6,232	65,723	30,064

[1] The date for placing grains under price support ended Jan. 31. Mar. 15 data represent revisions due to late reporting.

Soybeans: Quantity under support compared with loans redeemed through Mar. 15 (1,000 bu.)

	Under support	Loans redeemed		Under support	Loans redeemed
Ala.	13	2	Mo.	5,344	1,243
Ariz.	1	0	Nebr.	200	21
Ark.	1,761	435	N. J.	7	4
Del.	6	0	N. Y.	[1]	0
Fla.	2	0	N. C.	104	11
Ga.	28	3	N. Dak.	842	127
Ill.	14,121	2,538	Ohio	2,022	426
Ind.	3,253	648	Okla.	16	4
Iowa	19,003	2,535	Penn.	2	0
Kans.	137	28	S. C.	291	64
Ky.	175	47	S. Dak.	505	48
La.	23	7	Tenn.	575	136
Md.	3	2	Texas	2	0
Mich.	145	30	Va.	3	1
Minn.	16,478	2,135	Wis.	62	4
Miss.	599	231	Total	65,723	10,730

[1] Less than 500 bushels. Note: The total quantity of 1956 crops put under support includes purchase agreements while redemptions are only from the quantity put under loan.

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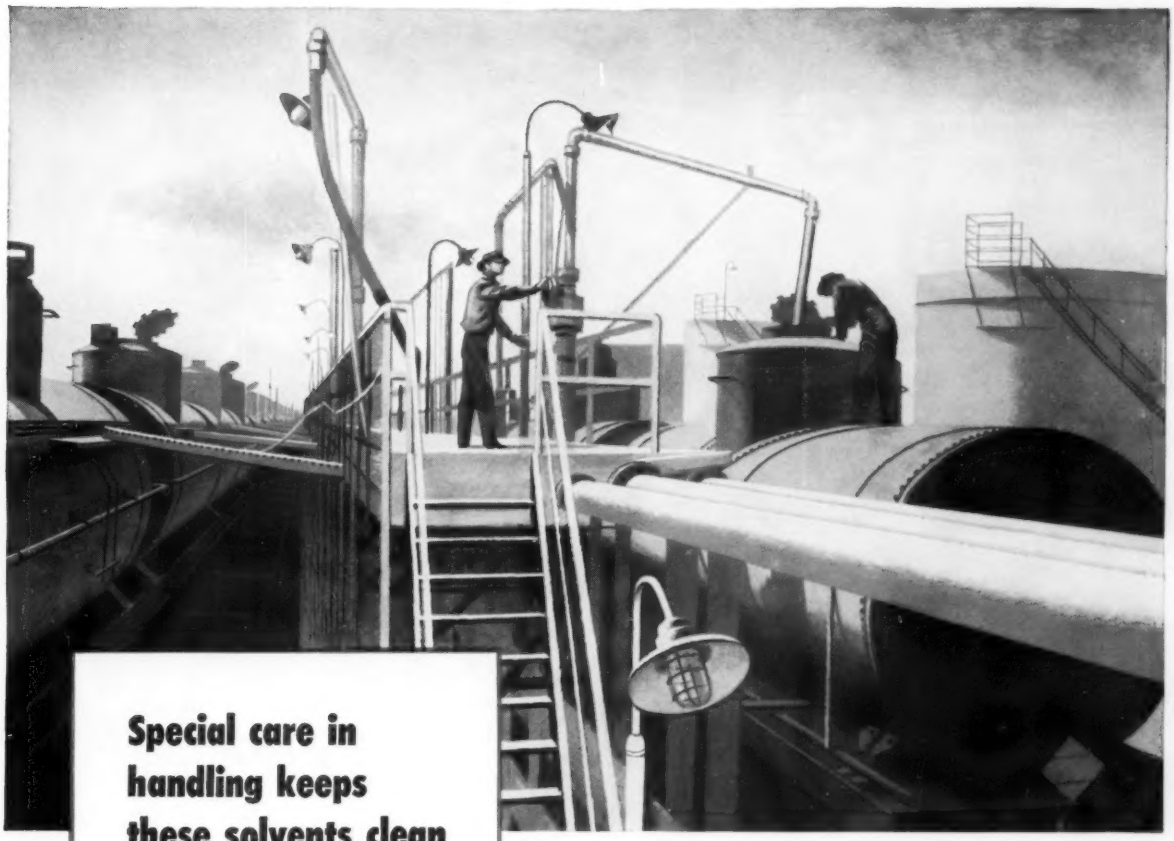

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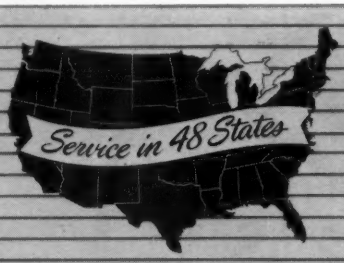

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